FREIGHT TRAFFIC: THE HOPES–AND FEARS–OF SHIPPERS

June 26, 1972

RAILWAY AGE

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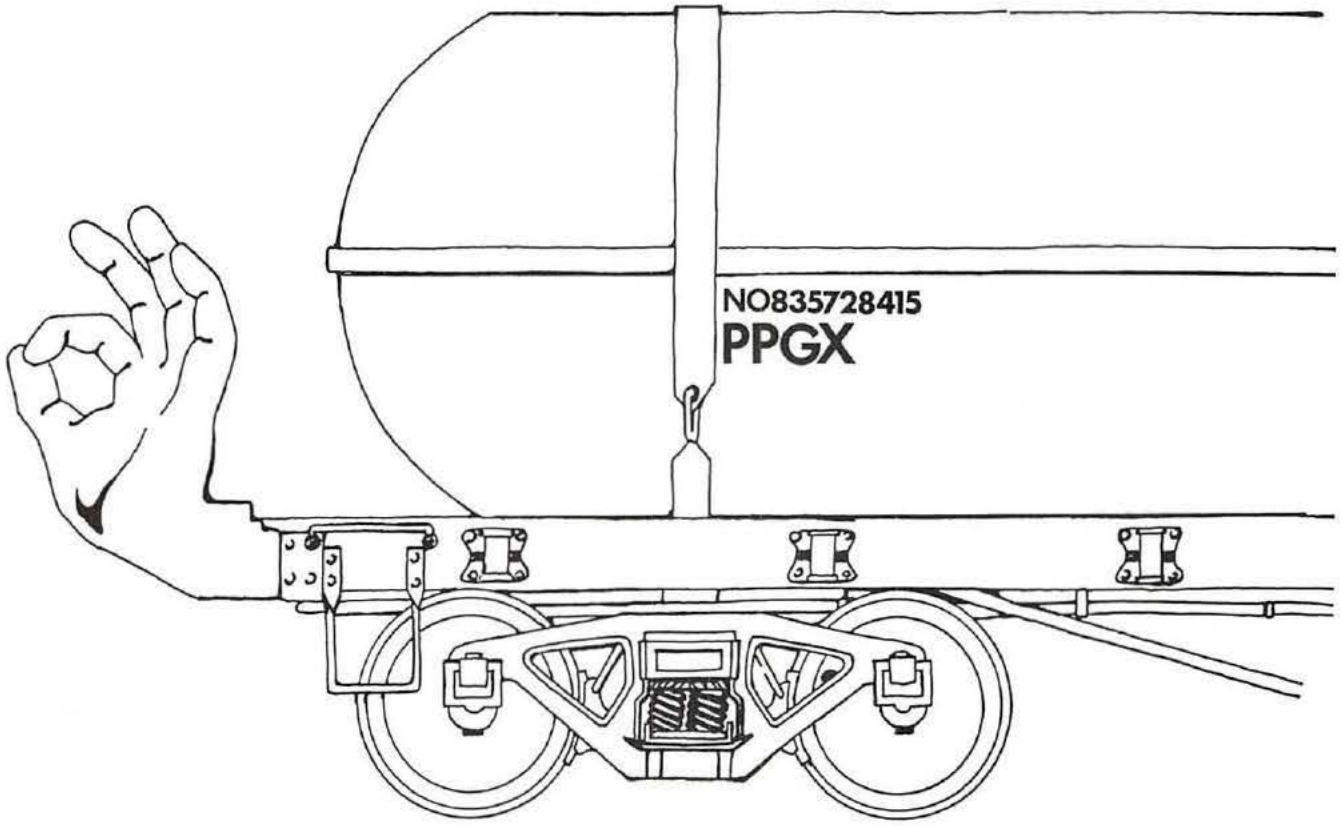

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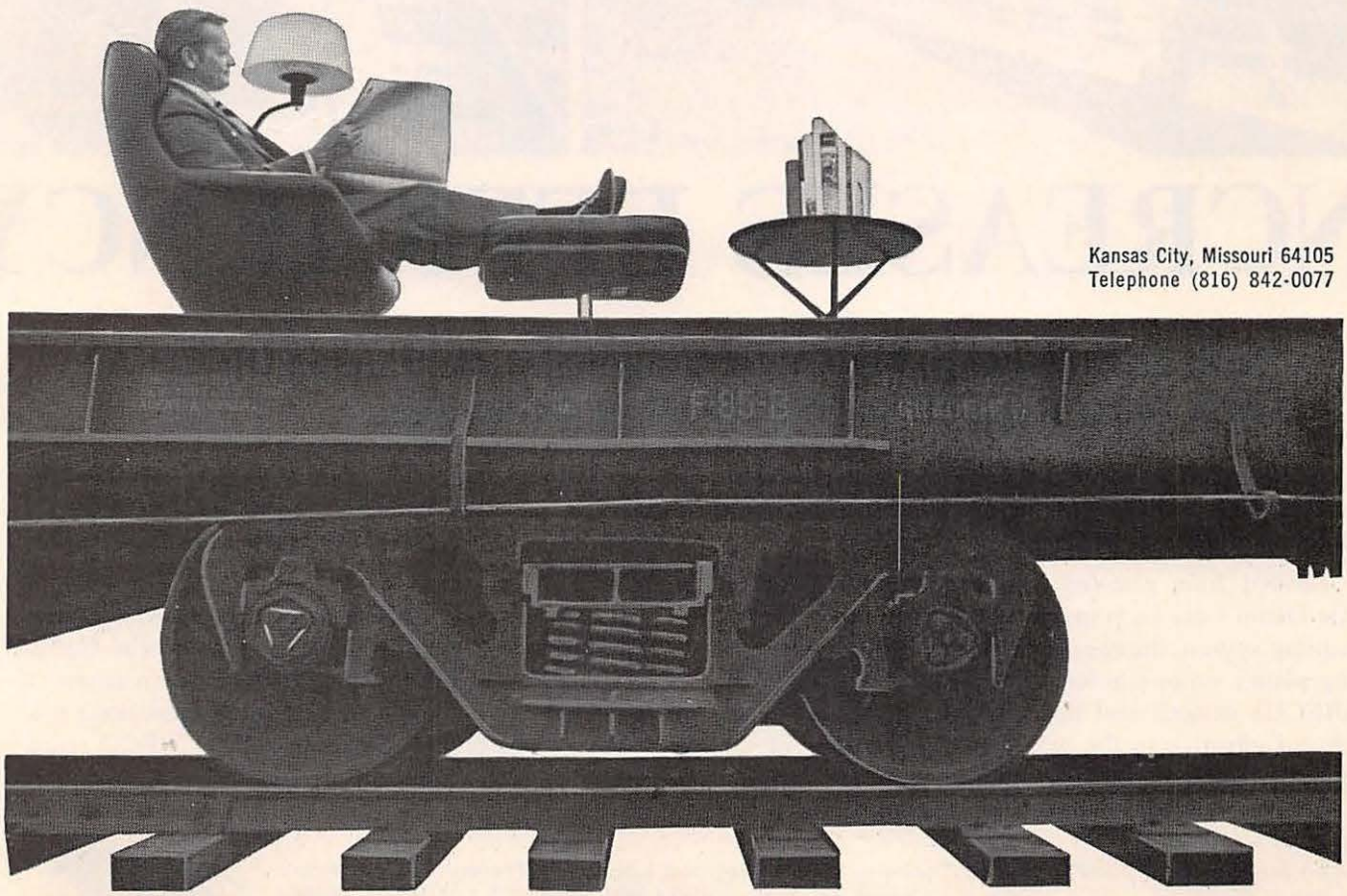

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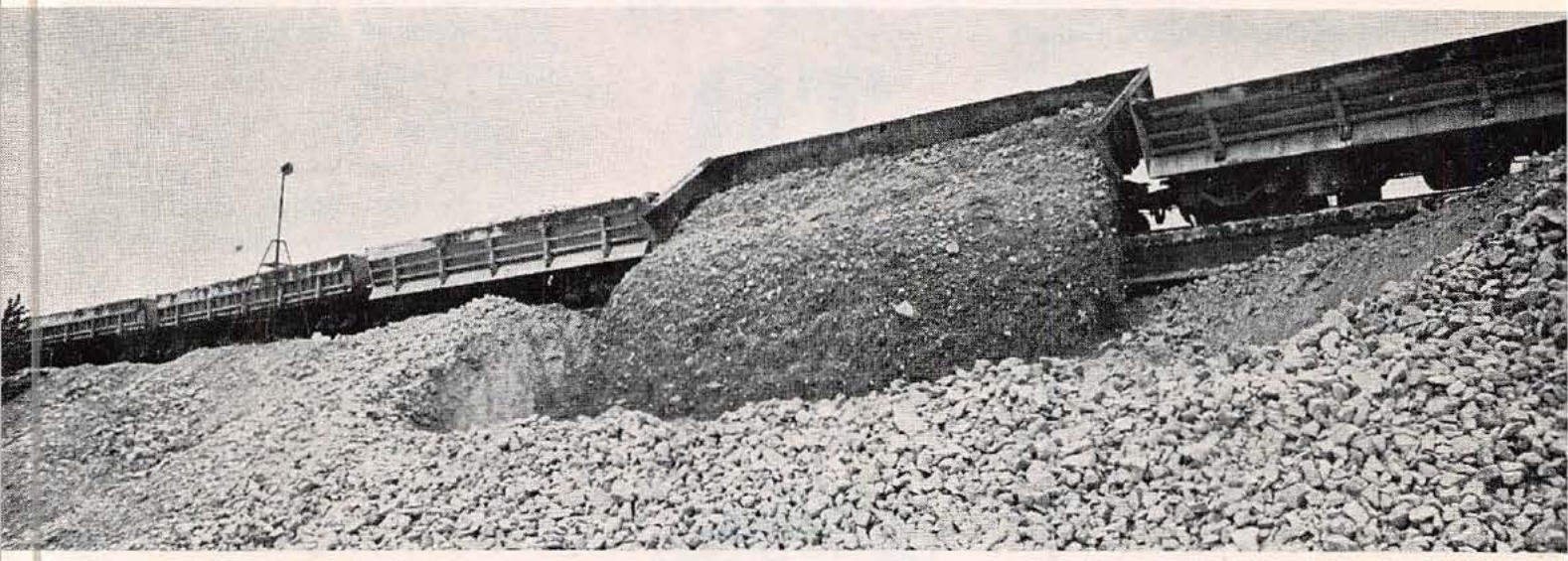

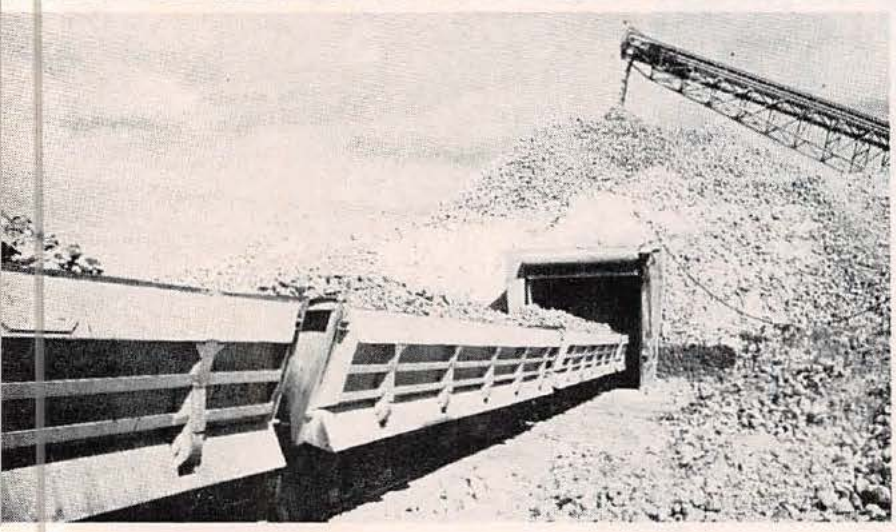

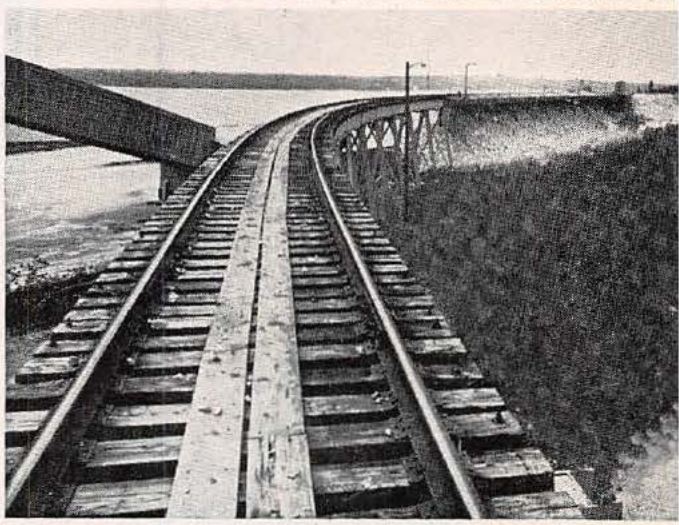

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June 12, 1972 • Vol. 172 No. 12

Editorial and Executive Offices
New York, N.Y. 10013, 350 Broadway
(212) 966-7700

ROBERT G. LEWIS: Publisher
LUTHER S. MILLER: Editor
FRED C. MILES: Executive Editor

Mechanical: Fred N. Houser
Art Director: Maurice H. Mates
Editorial Assistant: June Meyer
Librarian: Edith C. Stone
Production Manager: Fred B. Hecht
Manager—Contract Department:
Constance Nicolai
Promotion Director: George Dusenbury

Editorial and Executive Offices
Chicago, Ill. 60602, 29 E. Madison St.
(312) 641-5815

C. JAMES FISHER: Vice President—Sales
GUS WELTY: Senior Editor

Mechanical: Robert D. Bartley
Engineering:
Merwin H. Dick R.E. Dove
Signaling & Communications:
Robert W. McKnight
Editorial Assistant: Wanda Brown

Washington, D.C. 20004,
National Press Bldg. (202) 347-1155
Washington Editor: Reid Beddow

Brighton, Sussex, England
8 St. George's Place, (Brighton 685867)
International Editors:
John Levett Paul Goldsack

Advertising Sales Offices:
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Inside

LUTHER MILLER

UNIT TRAINS vs THE C5A

Just a few years ago, the automotive industry (which pays around $800 million a year for freight transportation) was taking an interested look at the giant new cargo planes then on the drawing boards—especially the C5A. General Motors was one of the interested on-lookers.

But the C5A ran into problems; at the same time the railroads, working closely with the auto-makers, were trying hard to lock up a lion's share of Detroit's business, both auto parts and new vehicles. The unit train came along; with it came first auto-piggyback, then auto-rack-car transport, and then such refinements as the GM-pioneered Vert-a-Pac and Stac-Pak cars.

As a result, GM today is far less interested in the C5A, and far more interested in the unit train, as a freight prime-mover—now and in the foreseeable future.

Associate Editor Bob Bartley recently journeyed to Detroit to discuss these and related matters with General Motors. Bob was impressed with what he saw and heard. "GM is just plain awesome—think of it, $28 billion in annual sales, production of 7.8 million cars and trucks last year, and around three-quarter million employees world-wide.

"In view of all this, it's not surprising that GM is this country's second largest freight shipper, ranking just one notch down from the U.S. government.

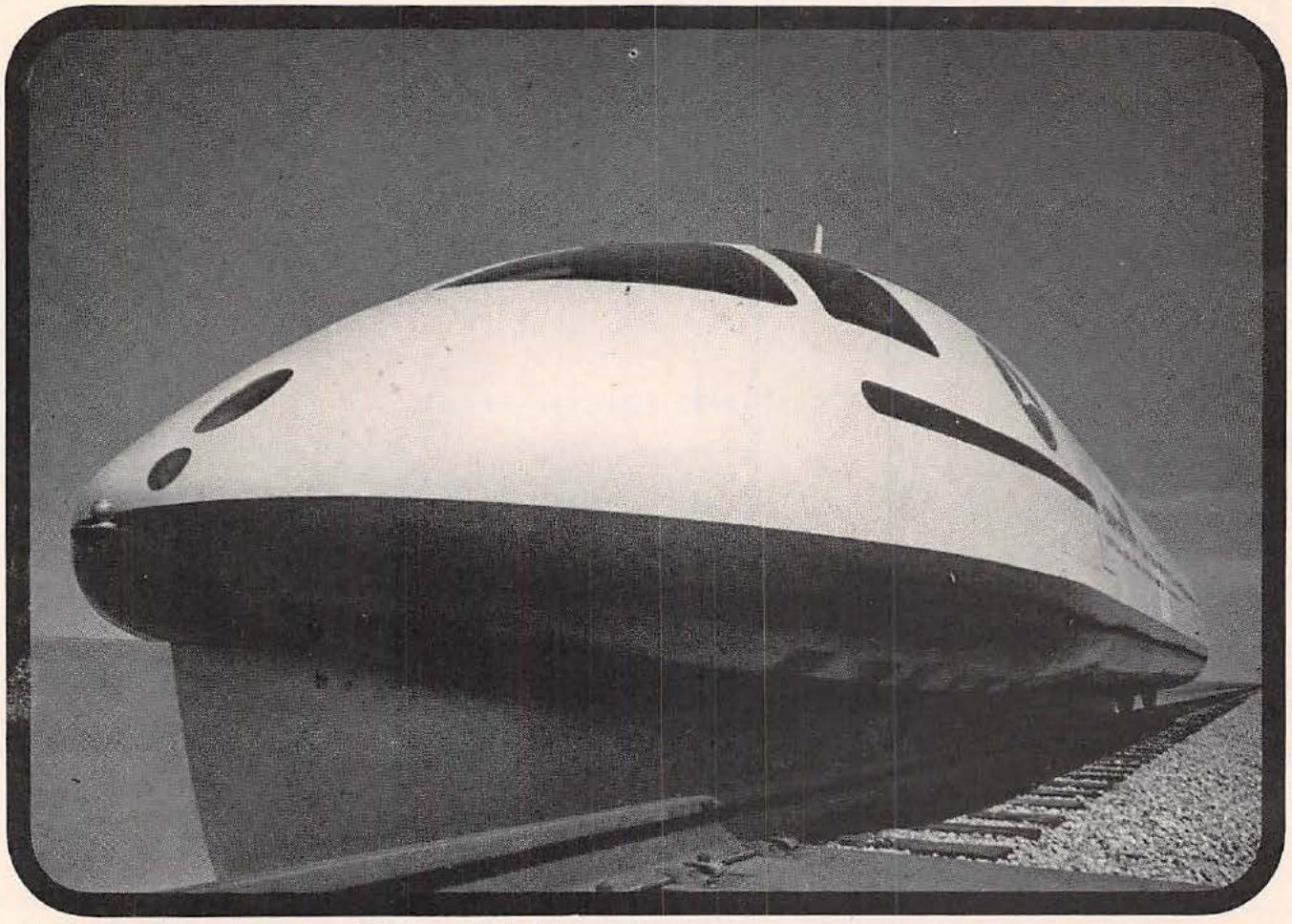
"All transportation matters for the corporation are handled by Logistics Operations—an awesome job in itself. And although Milford Barron, executive in charge of Production Control, Procurement and Logistics, and Vic Long, director of Logistics Operations, are quite soft-spoken, they have some very firm ideas as to how rail transportation must trend. And they feel that changes have to take place starting now."

Some of these changes are described by Bartley in the cover story beginning on page 24.

WHAT KIND OF YEAR HAS IT BEEN?

As mid-year approaches, our editors are busily potting up statistics and interviewing key industry leaders in an attempt to chart the year's performance so far and to make some educated guesses as to what the second half is likely to bring. Our report on the state-of-the-industry will be published July 10. It will include, among other things, a listing of every railroad legislative proposal now in Congress and a realistic assessment of each proposal's chance of passage. Mid-year progress reports from the Association of American Railroads and the Railway Progress Institute, along with those of selected bellwether carriers, are also on tap.

Also scheduled July 10: A status report on the Santa Fe/Department of Transportation test track. . .and a story on this country's first foreign-built railroad passenger cars.



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This is no UFO. The U.S. Department of Transportation identifies it as its own LIM (Linear Induction Motor) test car. And the way things look, it could give ground transportation a whole new dimension in speed and efficiency.

With a rated speed of 250 mph, this vehicle of the future is propelled by the electromagnetic interaction of its Linear Induction Motor with a conductor fin centered in the track. Between, we might add, CF&I rails supported by CF&I tie plates.

LIM testing is one stage of a far-sighted government program to develop transportation that incorporates the privacy and flexibility of an automobile with the safety, high speed and lower pollution levels of rail systems. For our part, CF&I is proud of its involvement in these pioneering efforts. Proud, too, that CF&I rails, tie plates and accessories have been selected over the years to help carry new concepts into reality.

But since we're steel men, we're not about to stop now. We'll keep right on innovating and improving our products for even greater safety and economy. Like Hi-Si rails and Hi-Cant tie plates. Count on us today—to put you on the right track to tomorrow.

We serve you right—and have for 100 years.

CF&I STEEL

CF&I Steel Corporation

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RAILWAY AGE

JUNE 12, 1972

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For this issue's cover, Wilfred Wietstock photographed new Cadillacs being unloaded at Southern Pacific's West Oakland, Calif., yards.

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Short and Significant

HOUSE PANEL REJECTS RATE BILL

The House Transportation and Aeronautics Subcommittee on June 13 in executive session decisively defeated a bill to permit freight forwarders to negotiate contract rates with rails on movement of consolidated freight shipments. The bill, H.R. 7986, has a Senate counterpart, S. 1896. The defeat lays to rest any chance of passage by this Congress. Eastern and Southern rails (except Penn Central), motor carriers, and NIT League opposed the bill. Western railroads, ICC, and forwarders supported it.

HOUSE OKAYS $227 MILLION FOR AMTRAK

The House on June 13 approved and sent to the White House a bill authorizing $227 million in operating grants for Amtrak through June 30, 1973. The bill includes sanction of $100 million in Federally-backed loan guarantees for equipment acquisition. A provision limits the salary of Amtrak President Roger Lewis and other officers to a $60,000 a year maximum (Lewis now receives $125,000). Despite the roll-back, an Amtrak spokesman said Lewis had no intention of resigning.

NEW YORK'S MTA ORDERS 50 MORE CARS

New York City's Metropolitan Transportation Authority last week signed a $15,604,000 contract for 50 more Metropolitan electric commuter cars for use on the Hudson and Harlem Divisions of the Penn Central. The contract, with General Electric, calls for building the cars at the Budd Co. plant in Philadelphia. Delivery of the cars is scheduled to begin next December and be completed by the following February. After delivery, the combined commuter fleet for the two divisions will consist of 178 Metropolitans and 87 other electric coaches.

AUTO-TRAIN WILL EXPAND SERVICE

Auto-Train, the Washington, D.C.-to-Florida intercity passenger carrier, said June 8 it had purchased 33 bi-level, half-dome passenger cars from Union Pacific at an undisclosed price. The new equipment, when renovated, will be used for two additional trains on the north-south run. In addition, Auto-Train said it was negotiating for an altogether new route—reportedly Cincinnati-to-Florida, but company executives said such a route would not be in service until next year at the earliest.

MACHINE-TOOL ORDERS STAY HEALTHY

Orders for U.S. machine tools, a key indicator of the state of the economy, totaled $109,000,000 in May, according to the National Machine Tool Builders' Association. The figures makes May the second highest order month of the year, exceeded only by March—when orders hit $119,100,000. Orders for the first five months of 1972 have reached $478,950,000, which is 55% ahead of the $308,900,000 recorded in the comparable 1971 period.

TWO ROADS TEST COPTER SURVEILLANCE

As part of an anti-vandalism test program funded by the Federal Railroad Administration, a helicopter is now patrolling Penn Central and Reading passenger and freight operations in southeastern Pennsylvania on a 24-hour basis. Donald L. Nelson, PC's director of security, points out that Penn Central has already had considerable success with a similar copter surveillance program in New York administered by the Metropolitan Transportation Authority with funds from the New York State Office of Crime Control Planning. If the four-month Pennsylvania test is successful, it will be put on a year-round basis.

MONTEJANO NAMED TO ICC

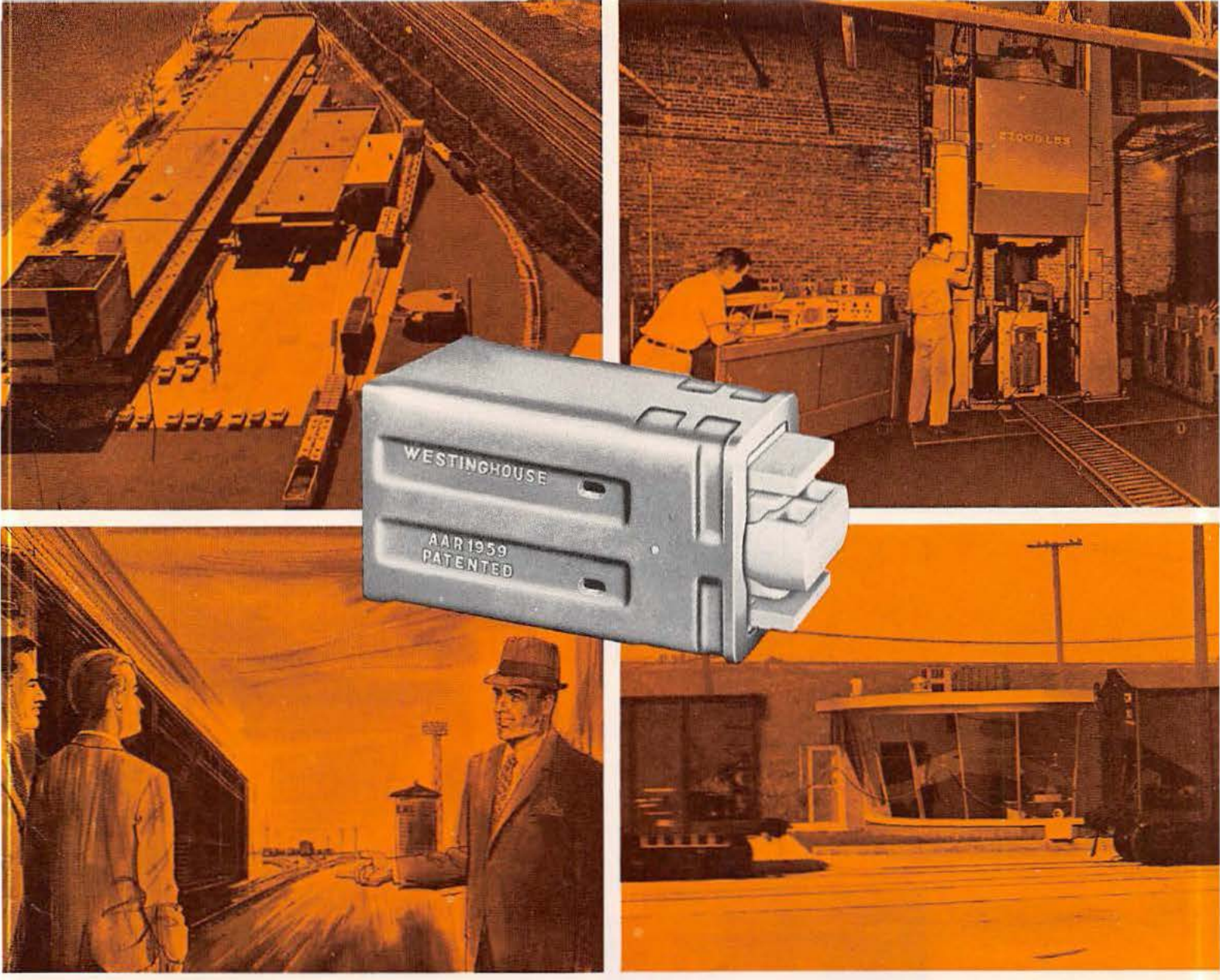
President Nixon on June 15 nominated Rodolfo Montejano, 34, a Santa Ana, Calif., lawyer, to replace Laurence K. Walrath as a member of ICC. Walrath, whose term runs to Dec. 31, resigned as of June 30. Montejano would serve out the remainder of Walrath's term and presumably be renominated for a new term of his own. It was the third presidential appointment to ICC this year. In March the President renominated Rupert L. Murphy and nominated Alfred T. MacFarland to replace Commissioner John L. Bush.

BN SEEKS C&S STOCK

Burlington Northern, which has owned about 75% voting control of Colorado & Southern since 1908, is making an exchange offer, subject to Interstate Commerce Commission approval, for C&S stock. BN will declare the offer effective as soon as 25,337 shares of all classes of C&S stock are deposited. Expiration date of the offer is July 24.

TROIANO APPOINTED L&HR TRUSTEE

John G. Troiano has been appointed trustee of the bankrupt Lehigh & Hudson River by the U.S. District Court for the Southern District of New York. The carrier entered reorganization in May. Troiano was a tax consultant for the Erie Lackawanna prior to becoming a tax specialist to L&HR in 1959.



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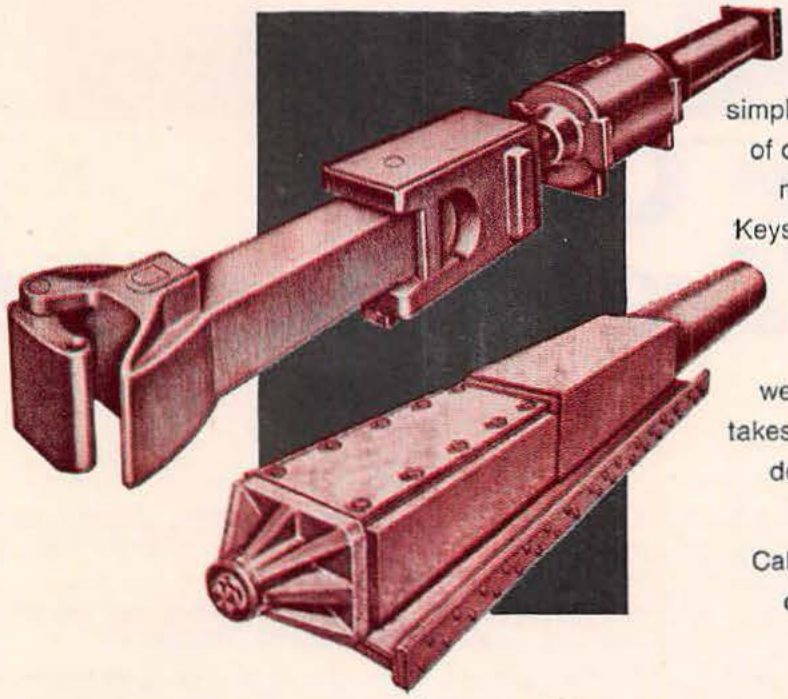

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RAILWAY AGE
NEWS

Earnings rise, but returns remain low

Final figures are now in for the first quarter—and, statistically speaking, a case can be made for a dramatic turnaround. The industry's quarterly revenues were at an all-time high. Ordinary (net) income was more than double the year-ago figure. Rate of return on investment climbed by nearly three-quarters of a percentage point.

Actually, the picture remained dim and there was little sustained cheering.

On record revenues of $3.2 billion (up 2.3% over the $3.1 billion grossed in the first quarter of 1971), the industry netted only $78.7 million. While that was a substantial improvement over the $36.1 million reported a year ago, it was still less than one-half the corresponding net in 1966, which the AAR calls "the railroads' last good earnings year."

The rate of return did climb—from 1.94% in 1971 to 2.67% this year. But, as the AAR pointed out, it was far below the 6% return which the ICC says is essential if the railroads are to keep pace with present and future demands.

Of 68 reporting Class I railroads, 20 showed deficits in first-quarter ordinary income—12 in the Eastern District, eight in the West.

CLASS I RAILROADS IN THE UNITED STATES

For the 1st Quarter

	1972 (millions)	1971 (millions)
Operating revenues	$3,195.5	$3,124.6
Operating expenses	2,529.7	2,512.9
Tax accruals	284.4	288.0
Rents (net debit)	211.6	205.7
Net Railway Operating Income	169.7	118.0
Rate of return*	2.67%	1.94%
Ordinary Income**		
United States	78.7	36.1
Eastern District	Def. 58.9	Def. 79.8
Southern District	54.2	45.2
Western District	83.4	70.7

Def. - Deficit
*For 12 months ended March 31
** Net income before extraordinary and prior period items.

High Court lets ICC set home-bound-car rules

The U.S. Supreme Court has ruled that ICC has the jurisdiction to impose on rails mandatory compliance with car service rules which require that unloaded freight cars be returned in the direction of the owning railroad.

The high court thus reversed a lower court which had issued an injunction preventing ICC from making the rules mandatory.

AAR had asked that the lower court decision be upheld.

But the Supreme Court conceded that the rules' effect "will be to disrupt. . .established practices. . . and. . .cause serious inconvenience to shippers and railroads alike."

The two car service rules at issue have been part of AAR's car service code since 1902.

Rule 1 requires foreign cars empty and at a junction with the owning road be sent loaded or empty in the direction of the home road.

Rule 2 in general requires foreign empty cars to be loaded to or via the owner's rails or in general sent loaded closer to the owner road. The rule also requires foreign cars to be delivered empty to the road from which they originally were received at the junction where the transfer had taken place.

In 1969, ICC promulgated the two rules as part of its own car service rules, making them mandatory and with sanctions for non-compliance, although exceptions are allowed for "inequities and hardships."

Rails and some shippers then went to court to block ICC's action. The Supreme Court decision grew out of that litigation.

Justice William A. Rehnquist who wrote the high court's opinion said, ICC was "justified in deciding that [rails] were afflicted with an economic illness which might have to get worse before it got better. . .Car service rules which would tend to restore incentive to [rails] to augment their supply of freight cars, even at the temporary expense of optimum utilization of the existing fleet of freight cars, conform. . .to the statutory requirement of reasonableness."

Illinois, railroads make "fare" exchange

Three of Chicago's six commuter railroads have been awarded debt service grants totaling $1,395,600 by the state of Illinois. In return, the three—Burlington Northern, Milwaukee Road and Rock Island—have agreed to take no action to increase fares before Jan. 1, 1973. Close to 45,000 commuters will benefit from the grants.

Debt service grants are authorized under the state's Mass Transportation Grant Program enacted in 1971. Funds for the three commuter roads will be distributed in this manner: BN, $662,100; Milwaukee Road, $538,800; and Rock Island, $194,700.

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Circle 8 on coupon page 48A

PC seeks to lop off 1,933 more miles

Penn Central on June 15 asked its Federal bankruptcy court for permission to abandon 1,933 miles of branch line track, about 10% of the entire PC system.

Federal Judge John P. Fullam set Sept. 11 as a hearing date for the request. His sanction must be obtained before PC can institute abandonment proceedings before ICC.

Currently pending before ICC are abandonment filings for another 1,100 miles of track line. Requests for an additional 500 miles of abandonments are expected to be filed soon. That makes a grand total of 3,600 miles in abandonments filed or about to be filed with ICC.

ICC said the new 1,933-mile abandonment would be the largest such case ever at the agency.

The 1,933 miles cover 138 separate segments of track. The largest is a 201-mile stretch between Mackinaw City, Mich., and Cedar City, Mich. The second largest is a 50-mile segment between Kendallville, Ind., and Vicksburg, Mich.

PC trustees, in a progress report on the carrier's reorganization, estimated PC could save $3.3 million a year by abandonment of just the 1,100 miles now pending before ICC.

PC is still in the process of labeling other uneconomic lines, which could total as much as 9,000 miles of its 20,000-mile system.

$1-million exhibit set for RSS show

One million dollars worth of automation and electronic gear along with computers will be on display Sept. 25-29 in Chicago for those attending AAR's Communication & Signal Section and Data Systems Division annual meetings. The basic hardware, components and systems equipment for serving the vital control systems of the railroads will be exhibited by members of Railway Systems Suppliers Inc. The wide range of products on display are basic for todays' efficient control of the railways in three major areas—communications, data processing and signaling.

RSS exhibits will be covering equipment ranging from the familiar dial telephone to complex and wide-ranging teleprocessing systems. As in previous years' exhibits, displays will include working systems. For example, displays from "live" automatic car identification system installations will show visitors consists of passing trains. Real-time freight car control systems including operating computer input/output devices will be there for data managers, communications engineers and operating supervisors to see.

Emphasis in design is to provide more sophisticated controls for less money. For example, extensive use of integrated circuits techniques in electronic hardware provide for more control power for the buck. Minicomputers will play a key role at the exhibit. Minicomputers now provide process control for automatic classification yards. Computer I/O terminals use minicomputers to provide intelligent control over data flow.

Also, safety will be stressed at the exhibit via displays of highway grade crossing protection equipment, including improved flashing lights for greater visibility. Newer types of track circuit controls are available which require less maintenance and provide more sophisticated controls under a wide range of operating conditions.

Exhibits will be at the Palmer House, convention headquarters hotel. Exhibits will be open Monday through Friday so that both communications and signal engineers (meeting Monday through Wednesday) and data processing managers and systems analysts (meeting Wednesday through Friday) will be able to visit them.

Visitors Center project on again

Washington's white elephant Union Station seems destined to become a National Capital Visitors Center after all.

The idea of converting the terminal, whose main waiting room's pediment is lined with scores of matching statues that appear to be Viking spearmen, has been kicking around for years, only to bog down in 1970 after Penn Central went into reorganization. Now, it has been learned, the station—jointly owned by PC and B&O/C&O—can undergo conversion without PC's anteing up a dime.

Financing will be undertaken by B&O/C&O with Chemical Bank of New York and Emigrant Savings Bank of New York. The two banks will supply $16 million to Terminal Realty Baltimore Co., a B&O/C&O subsidiary, which in turn will issue notes for the sum. What remains to be done now is to obtain sanction of PC's bankruptcy court for the deal and signatures of all parties on the necessary papers.

C&NW planning to change its shape?

Employee-owned Chicago & North Western may become a leaner, fitter property—if management can put across the idea that C&NW today is forced to operate far too much unproductive branchline mileage. How much too much? President Larry S. Provo puts it this way: "North Western operates approximately 10,600 miles of track in 11 midwestern states. We have studied this network at great length and in great detail. The inescapable conclusion is that North Western's track mileage *should* be reduced to a total of about 7,500 miles and *must* be reduced to no more than 8,500 miles. What this means, of course, is that between 2,000 and 3,000 miles of track should be abandoned—not five or 10 years from now but as soon as possible. This incredible maze of unnecessary track mileage, consisting almost entirely of light-density branch lines, is a burden on interstate commerce that the railroad, its shippers and indeed the vast majority of the territory it serves can no longer afford."

Over the past three years, Provo notes, North Western has eliminated about 1,100 miles of light-density line: "This has reduced the drain on our resources and has produced genuinely positive benefits for the railroad and its hundreds of shippers. A very substantial portion of the rail and ties that for years went almost entirely unused on those lines has been taken up and re-used on higher-density lines where it was really needed—thus upgrading our service over these lines. And the small amount of business that these abandoned lines did carry wasn't, for the most part, lost to the railroad. In the case of grain, most of it was simply hauled a few miles further to a higher-density line."

Still, Provo says, "Approximately 40% of the North Western's mileage generates approximately 4% of the total revenues. The blunt truth is that the railroad plant of the Midwest, and most particularly the railroad plant in the territory served by the North Western, must be modernized if it is to remain a viable transportation system and continue to perform the vital task of moving the products of industry and agriculture to market."

Likening the branchline problem to the old problem of maintaining passenger service, Provo concludes: "We at North Western believe that branch lines could well become the passenger trains of the decade of the '70s, similarly draining off huge sums of capital that should be invested in upgrading and modernizing the railroad plant where it's most needed. This must not be permitted to happen."

Lines on Labor

GUS WELTY

LIFE-STYLE: PART 2

Every once in a while, something appears in print that seems to touch a nerve, or at least a responsive chord. One such "something" was a brief comment in this column (RA, May 29, p. 16) to the effect that changing life-styles are posing a serious problem for rail management in attracting, motivating and retaining division-level operating managers. As with so many things in this complex world, the response was a mixture of good news and bad news.

PLUS: HARRIED MANAGEMENT TAKES TIME TO HELP

On the good-news side, for example, there's the experience of a young man in Massachusetts who decided, as part of a work/study program, to study and report on Penn Central. With no great feeling of optimism, he wrote to W.H. Tucker, a senior executive representative of PC. "My view," says Jim Tilley, "was that PC officials had their hands full trying to return the railroad to viability. I figured I would receive a polite reply, explaining to me that they at PC were just too busy to bother with me." Well, things didn't work out that way. Tucker was more than willing to help, F.J. Orner (a senior consultant to Tucker) became Tilley's community sponsor, and the young man was put in touch with "a lot of nice people who went out of their way to help me."

Says Tilley: "Nobody tried to discourage me. On the contrary, everyone encouraged me." Next fall, this young man enters Northeastern University with this attitude: "I can truthfully say I am more enthusiastic than ever, about a career in the railroad industry."

MINUS: THE "GOOD GUYS" ARE MOVING ON

On the bad-news side, however, there is an observation from an operating-department supervisor who, for obvious reasons, asks that his name not be used. It's his conviction that "the complex problem of attracting, training, motivating and retaining line supervisors is the No. 1 problem facing higher management today. Unfortunately, it seems that few railroads recognize that this problem even exists; or, if the problem is recognized, very little corrective action is being taken. In the relatively short period of time that I have been in operating supervision—less than 10 years—I have seen the decay in the quality of line managers. It seems that the quality people are drifting away from our industry because of excessively long hours, wages not commensurate with responsibilities and the narrowing of freedom to act and to make decisions."

Of course, there are exceptions to this indictment. If there weren't, the industry probably couldn't operate at all. Missouri Pacific is one road that comes immediately to mind, where bright young men *are* moving into—and staying with—positions of major operating responsibility. And there are others.

It's also true that railroads are not alone in demanding a little or a lot extra from supervisory personnel, though railroads do seem to have a high-profile reputation in this regard.

At the same time, you have to wonder. Let's say that Jim Tilley completes his education at Northeastern, gets his degree and goes to work for a railroad. Ten years pass. Will he still be "more enthusiastic than ever about a railroad career"?

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French National Railroads

Circle 9 on coupon page 48A

Courts take over in PC/UTU dispute

It was perhaps inevitable that Penn Central's crew-consist dispute with the United Transportation Union would wind up before a judge—only in this case it's two judges, in Philadelphia and Washington. Either side would have been free to take action in the dispute June 15, at the expiration of a 30-day no-change period following the report of Emergency Board 180. Instead of acting, however, both sides went to court—Penn Central's trustees petitioning Federal Judge John P. Fullam for a hearing in Philadelphia and UTU asking U.S. District Court in Washington for "declaratory judgment and injunctive relief." Each side was critical of the other's conduct in post-report bargaining. PC declared that UTU "hasn't responded with a single meaningful settlement proposal but has sought to avoid any resolution of this dispute." UTU accused the trustees of "using every effort to attempt to make us the scapegoat for liquidation." The union, which made Judge Fullam (PC's bankruptcy overseer) party to the complaint, said it was "attempting to ascertain who we are really dealing with—the management itself, the trustees or the court. We have to be advised where the absolute authority is in this matter." UTU President Al H. Chesser said the lawsuit "was merely to insure that those who are in charge of Penn Central affairs would not be authorized to provoke a work stoppage on PC by imposing unilaterally unsafe and unfavorable work rules on our members. If those responsible for the operation of PC will now accept the President's emergency board report and begin negotiations in good faith, the UTU will immediately withdraw its complaint."

BN granted air forwarding rights

Burlington Northern is off and winging in the air freight forwarding business as the result of a grant of "indirect air carrier authorization" by the Civil Aeronautics Board. Named Burlington Northern Air Freight Inc., the new air freight forwarder has start-up stations in 10 cities—five of them on the BN rail system.

BN's executive vice president, N.M. Lorentzsen, has been named chairman of the board of the new firm. L.L. Rodberg, a former officer with Airborne Freight Corp., is BN Air Freight's newly-elected president. Although the new company will have its own sales force, plans call for "close cooperation with the railway's marketing department," he says.

With formation of the new company, BN becomes the third railroad to enter the air freight forwarding business. Both Santa Fe and the Southern are in the business, too.

Coast to coast in four days

First through land-bridge COFC unit train from Long Beach, Calif., to Central of New Jersey's new Portside Terminal at Elizabeth, N.J. (adjacent to Port of New York Authority's marine facilities) is shown as it rolled over CNJ tracks past Plainfield, N.J., station on June 11.

Route: Santa Fe-Norfolk & Western-Lehigh Valley-CNJ, with LV power and caboose in run-through service from Bellevue, Ohio, to Portside. Time: four days coast to coast. Consist: 52 cars with 104 containers of general merchandise for distribution to customers within the New York metropolitan area; containers were transferred to chassis by CNJ Piggypackers at Portside for delivery.

The consignee was Zim Container Service, Inc., which utilized the railroads' new land-bridge route following trans-Pacific sailing from the Orient.

Plans call for establishment of land-bridge trainload rates westbound as well as eastbound via the new route.

C&NW's instant information service, using a computer and telephone facilities, can locate any car on the line in seconds.

Chicago and North Western tracks on any given day carry between 50,000 and 60,000 freight cars.

Clerks in 40 offices around the country can locate one or several of them in seconds, using a video data transmission system linked to the C&NW computer by telephone lines.

That sort of service is only one of the results of the information network Chicago and North Western has developed in consultation with the Bell System. Computerized work assignments for empty cars and idle locomotives are coming next.

Then, computerized reconsignments and diversions of shipments.

And instructions to expedite one particular car in a train.

The goal of all this effort, of course, is to optimize car usage through the proper mix of computers and communications.

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Watching Washington

REID BEDDOW

DEREGULATION AND SAFETY

Unexpected and startling support for the Administration's package of deregulation proposals has come from the National Transportation Safety Board. NTSB is an autonomous body within DOT that heretofore in its five-year lifetime has confined itself to investigation of accidents, collection of safety data, and the making of recommendations for better safety practices that, while important, have never attempted to underpin major national transportation policy. Now, NTSB in effect has told Congress (in Safety Recommendation I-72-1) that if bills embodying the Administration's deregulatory plans are enacted, there would be a massive diversion of 66 billion ton-miles of freight annually from motor to rail carriers by 1980, and that this would be a good thing because rails are a safer mode than trucks.

In the cumbersome minuet of this year's transportation legislative process, when the orchestras of the regulated modes and the beleaguered rock bands of DOT have been assaulting Congressional ears with point and counterpoint, the solitary flute call of NTSB has momentarily stunned everyone.

NTSB even goes so far as to recommend against facilitating rail branch line abandonments because, it says, trimming railroad track would send traffic from a safe mode to a less safe one, i.e. highways.

The consternation of the motor carrier lobby at all this may well be imagined. Railroads, which have viewed the Administration proposals with some misgivings, are not so much consternated as flabbergasted.

As for Congress, NTSB's recommendations on the safety impact of the Administration bills adds to the discordant advice members have received all year. To many, the logic of NTSB is open to question. They ask: If safety is to be the pre-eminent consideration in formulating national transportation policy, why not construct more pipelines and dredge more rivers? For pipelines and domestic water carriers, according to NTSB data, are the safest modes of all.

NTSB's own answer to this is found in what it suggests as "an important basic principle" for transportation policy development: "Where all other factors are equal so that the possibility for a choice of mode exists, government policy should encourage the movement of freight via the safest mode of transport."

"TOKEN" TRANSFUSION FOR MASS TRANSIT?

The Senate Public Works Committee last week appeared to be poised to report out a 1972 Federal Highway Act that was expected to include some formula for diverting Highway Trust Fund monies to mass transit projects. The idea is backed by DOT Secretary John A. Volpe, who this spring proposed such a step. But some sources say the Senate committee's formula will represent only a token diversion. Meanwhile, Sen. Edward M. Kennedy (D.—Mass.) announced he would reintroduce legislation dissolving the Highway Trust Fund and setting up a National Transportation Trust Fund.

Las Vegas plans new people-mover

The odds are pretty good that Las Vegas will have a prototype of the "most sophisticated people-mover ever designed" ready by October, according to Burrell Cohen, president of Aerial Transit System of Nevada, Inc., a Las Vegas-based subsidiary of Pullman, Inc. Called the "Palomino," the vehicle is being submitted to the governments of Las Vegas and Clark County for, first of all, approval, and then hopefully for use in solving the transportation needs of the rapidly growing resort area. Less than 5½ feet wide, 12½ feet long and slightly over 5 feet high, the proposed steel-tired, fiber-glass-bodied vehicle can reach a maximum speed of 30 mph. Electrically-powered, it is said to be capable of providing a "noiseless ride." Two of Pullman's major divisions—Pullman-Standard and Swindell-Dressler—are participating in the development of the prototype vehicle and the demonstration test track, according to Cohen.

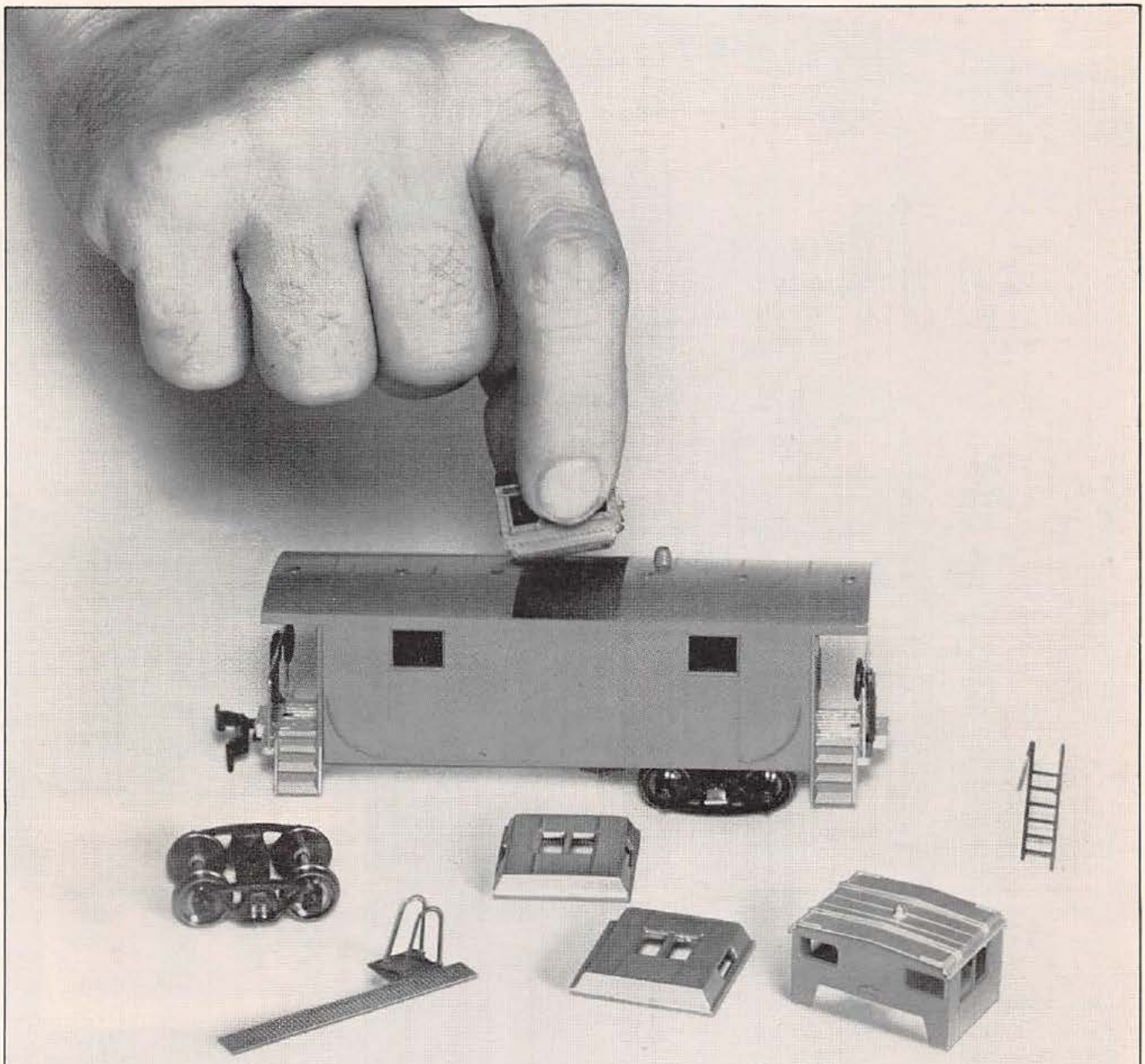
Power-assembly swap offered by GE

Complete power assemblies on a unit exchange basis are being offered by General Electric's Transportation Systems Division for all GE domestic road locomotives in the "U" series.

"The ability to change complete power assemblies on [this] basis can mean significant cost reductions on maintenance time," says J.E. Noel, manager of GE's Transportation Renewal Parts Operation. "Further savings can result from the way the complete assembly units are being shipped. GE is using modern protective containers constructed to provide for easy and orderly access to all components. The containers, which are returnable and reusable, are designed so that railroads can ship their older power units to GE for rebuilding."

The steel head cylinder assembly has been offered on an exchange basis by GE for the past year. Now other top deck gear—fuel pumps and nozzles, rockers and piston and rod assemblies—have been added to the package. Also included is an air intake manifold section, piston rings and gaskets. In the past, railroads have had to supply these additions to the GE power assembly package.

GE is offering two basic categories of rod assemblies: master and articulated. Each assembly is available in two kinds of bore: chrome and tufftrided. Two types of pistons—standard cast iron and steel crown (an aluminum body with a steel head)—can be part of the package.



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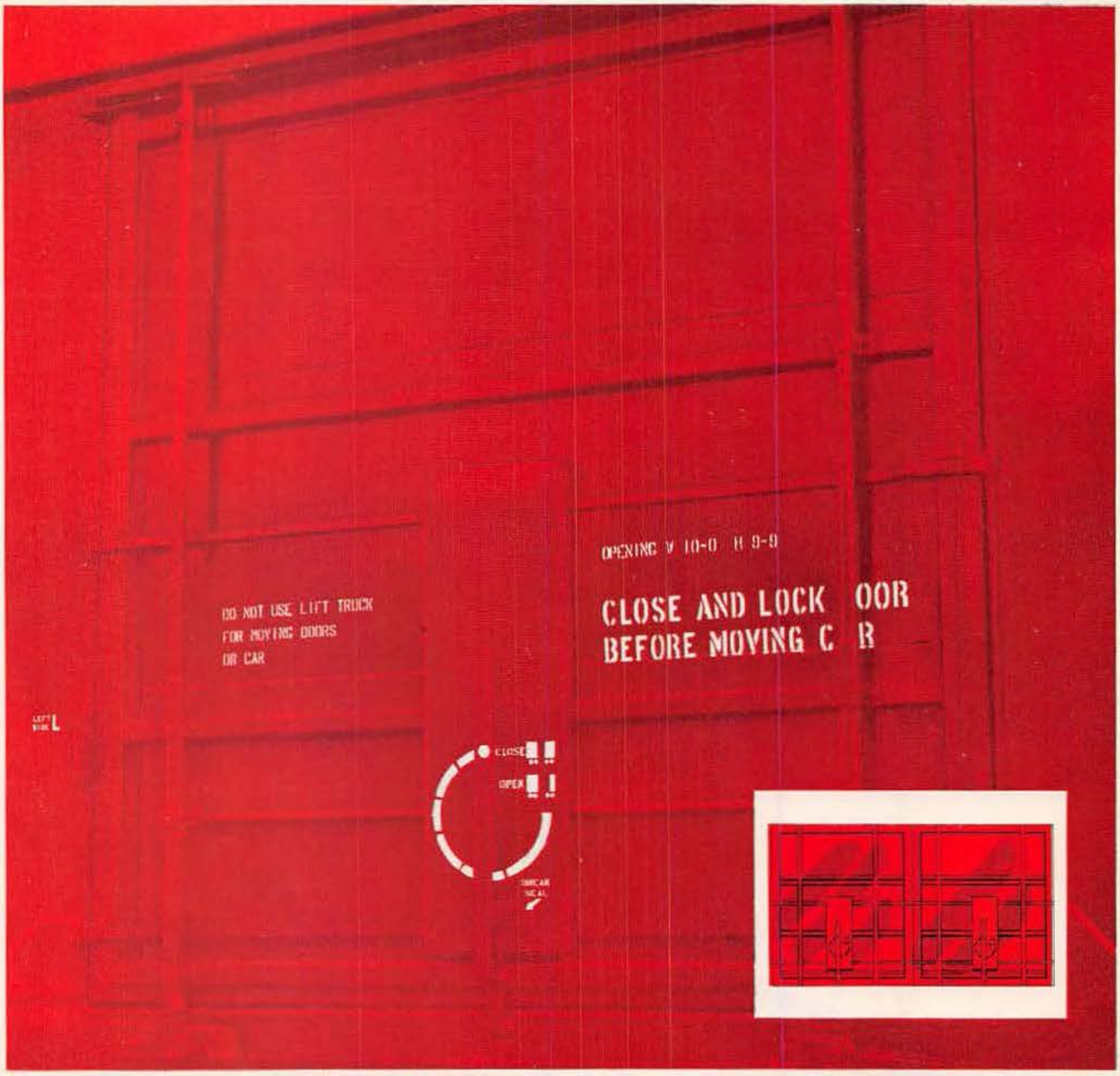

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Circle 12 on coupon page 48A ▶

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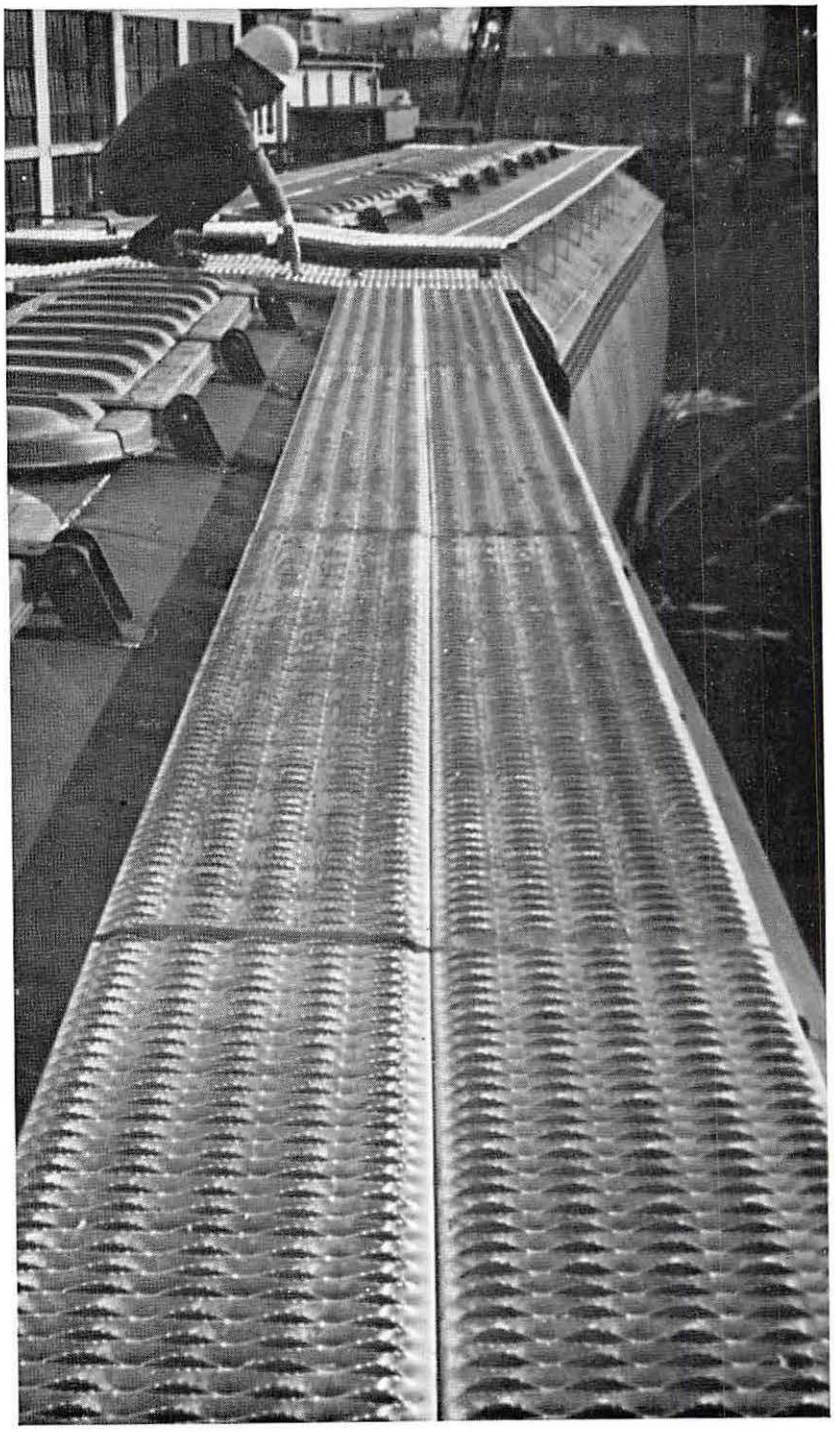

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Transportation Products Division

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Frank Upton heads revamped Mechanical Division

The AAR Mechanical Division met in Atlanta June 22 for its first business meeting since a major restructuring which also involved transfer of the organization's offices from Chicago to AAR headquarters in Washington. Discussions involved such subjects as the cleaning of ACI labels, continued concern over the condition of the load-restraining equipment in freight cars, and work aimed at achieving greater standardization of locomotives.

The Division has reduced its standing technical committees from 16 to 10 while strengthening its staff functions. It has also added new positions including director, technical committees, and director, rules and inspections. Each of the technical committees (such as Car Construction, Locomotives and Electrical Equipment, and Couplers and Draft Gears) has also been assigned a technically qualified AAR staff member who assists the committee chairman and works to assure communication between the committee and related railroad and railway supply organizations. Frank A. Upton, chief mechanical officer of the Milwaukee Road, was chosen Division chairman, succeeding J.G. Moore, assistant vice president—mechanical of the Southern, who was completing his two-year term.

Milwaukee CMO F.A. Upton
New Division Chairman

Southern's J.G. Moore
Retiring Chairman

• **Hotboxes are down.** Even prior to its reorganization, the Mechanical Division had been making major advances. It was noted last week that U.S. and Canadian railroads averaged 2,148,660 miles per hotbox setout in 1971, compared with slightly over 1.9 million miles in 1970 and 1.7 million miles in both 1969 and 1968. The growing proportion of roller-bearing-equipped freight cars was a major contributor.

The Mechanical Division has instituted an "Early Warning" system which calls attention to premature car-component failures that would create "an unusual hazard in railroad operation." Five of these were issued in the past year. The Division is now working to increase the accuracy of failure reports for parts such as roller bearings, wheels, axles, truck side frames and bolsters.

The General Committee of the Division is working to establish charges that would be assessed against component manufacturers when freight cars are held out of service at manufacturers' request for inspection of car parts. While this resulted initially from requests made by roller bearing producers, the idea is to make it cover any part.

The manufacturer would have to be responsible for the car part and also indemnify the car owner against all out-of-pocket expenses, labor and material, and per diem loss, including a daily line-haul allowance of 400 miles. The proposed limit for each such inspection would not exceed $500.

Mechanical Division committees are now meeting with railway customers and railway suppliers with greater frequency. The Committee on Locomotives and Electrical Equipment reported that its sessions with locomotive builders "are making progress in achieving a greater degree of standardization and in improving component performance."

The automobile industry has been contacted by the Committee on Specially Equipped Freight Cars. At its most recent session, a number of problem areas were discussed:

—Condition of bulkheads in auto parts cars;

—Defective center plates on 85-foot Hy-Cube and some 60-foot cars;

—Damage to Hy-Cube cars caused by the passing of couplers;

—Condition of car doors—particularly the sliding type on 50- and 60-foot cars;

—Maintenance of belt rails and other features of remaining 50-foot auto-parts cars.

The Car Construction Committee and other groups have been developing specifications for adjustable bulkheads used in box cars. A standard did become effective March 1, 1972, but other changes are now under study, including a separate specification for air-bag bulkheads and a uniform method of testing all such units. It was reported that the AAR will continue to refine specifications "to overcome the many costly problems which have been experienced with such equipment."

• **Approved banding.** Just prior to the annual session, the Mechanical Division called to the attention of railroads the fact that some shippers are using steel banding to secure open-top loads which is not in compliance with regulations of its committee on Loading Rules. Since these customers did not know of the requirements of General Rule 15-h-1, it was explained that "after April 1, 1972, 1¼-inch and 2-inch High-Tension banding used on open-top loads must bear the prescribed marking."

A new area of concern to the Mechanical Division is the legibility of automatic car identification labels to the electronic wayside scanners now being installed in substantial numbers. Frank A. Danahy, executive director of the Division, warned mechanical officers that "dirty labels account for a substantial portion of the labels which fail to read," adding that "the reliability of reading by scanner will be enhanced if labels are cleaned periodically."

He noted that a substantial investment has been made by the railroad industry, and that "a minimum amount of cleaning and maintenance" of labels is required because "an ever-increasing number of railroads are depending on ACI read-out in their daily operation." Labels accumulate more dirt if they are mounted close to the rail; flat cars consequently present a special problem.

The proposed cleaning, which must still be approved by letter ballot, would require use of an approved solution "when a car is on a repair track for any reason." The labels on trailers and containers would have to be cleaned "each time the equipment is washed." Danahy has urged that requirements of the new cleaning specification be implemented immediately "in order that full benefit may be derived from the ACI program."

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We are particularly pleased to announce that KarTrak's key personnel in all departments have also made the move to Servo. The new Servo-KarTrak team is now ready to help the railroad industry improve its car control and information systems through the cost-effective incorporation of KarTrak car movement data input systems. These computer-based systems generate more accurate and useful information — to increase car utilization, to reduce operating and car accounting costs, and to improve shipper-customer service.

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MEMBER RPI

GM/railroad goal:
Safe, fast transport for new autos

STAC-PAK FEATURES FOUR CONTAINERS riding aboard a flat car. Each container carries full-size automobiles stacked three high. Stac-Pak is

mechanically loaded.

By ROBERT D. BARTLEY,
Associate Editor

If General Motors can have its way about it, the only chance a GM automobile will have of getting damaged before the keys are turned over to a proud, new owner will be when the new owner gives a tire one final kick in the showroom at the time the purchase is made. GM has, in fact, made it quite clear that improved delivery of new automobiles to customers is one of its major goals for the early '70s, and beyond. Furthermore, it is fairly obvious that railroads have been chosen to play a key role in this damage-prevention program.

By now, the railroad industry should be keenly aware of what GM has in mind. The nation's largest automaker has already served as co-developer of a pair of rail vehicles aimed at damage-prevention—Vert-A-Pac and Stac-Pak—and it has pushed hard for the unit-train concept of moving both new automobiles and auto parts to major distribution points. Beyond these developments, GM divisions—working through the headquarters Logistics Operations Staff, now headed by Victor A. Long—are seeking to establish a dialog between their computers and those of the railroads so as to speed-up deliveries and also shore-up reliability of these deliveries.

Vert-A-Pac and Stac-Pak are evidence of GM's desire to keep the automobile out of sight—and, thus, out of the minds of vandals and thieves and others bent on inflicting damage to new automobiles moving by rail. The GM unit trains—which now number five, but could increase in the near future—along with the computerized control program being worked out with railroads, are evidence of GM's desire to get the millions of automobiles it ships by rail each year to the customer a lot faster than ever before.

The fleet of Vert-A-Pac rail cars will number 410 by the time the subcompact Vega's 1973 model year begins. This means that, in all likelihood, all Vegas shipped to U.S. dealers by rail in the new model year will go via Vert-A-Pac, and none by auto rack. That's a first. Vert-A-Pac, which hauls 30 of the subcompact Vegas in a nosedown position and completely out of sight behind hinged rail car sides which also serve as doors for loading and unloading, has been compiling an enviable record for damage prevention.

Stac-Pak, the concept which features four containers riding aboard a flat car, each one carrying full-size automobiles stacked three high, goes one step beyond Vert-A-Pac in providing protection for the automobile. While Vert-A-Pac must be manually loaded, Stac-Pak is mechanically loaded. Each of the four containers is more-or-less a "cocoon," and, as such, fits snugly around the stack of automobiles and does not leave room for a driver to exit from the autos; therefore, each auto must be mechanically *pushed* into position in the container during loading, and mechanically *pulled* from the containers at destination.

The Stac-Pak, still officially listed as part of an experimental program, is performing exceptionally well, says Vic Long. When first introduced in early '71 it was used exclusively for transporting Cadillacs from Detroit to California. Other GM divisions—notably Oldsmobile and Buick—also experimented with the concept. The fact that 50 new Stac-Paks have been ordered and placed in service recently is a pretty good indication that the experimental program is progressing to everybody's satisfaction. These cars will be used exclusively by the Cadillac Motor Car Division. Like the Vert-A-Pac fleet, the Stac-Paks are expected to increase in number, perhaps in the very near future. There is a strong possibility, too, that other GM divisions will follow Cadillac's moves and eventually establish heavier Stac-Pak experimental programs of their own. Pullman-Standard built the flat cars for the recent 50-car order of Stac-Paks. Evans Products built the three-level containers under sub-contract to Gunderson, Inc.

If medals were being passed out for damage-prevention accomplishments, the unit train should certainly qualify for a gold one, GM feels. At the moment, GM is participating in four combination new automobile-auto parts unit trains operating out of the Midwest daily. Destinations are Los Angeles, San Francisco, Arlington, Tex., and Atlanta. A fifth train—hauling new automobiles only—operates daily from a pair of GM plants in Kansas City to Chicago. "We're looking now toward the East Coast to see what might be done to improve service in that direction," advises Long. "We don't know yet whether a unit

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USS **United States Steel**

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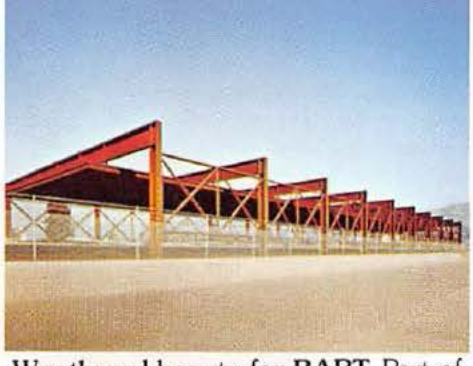
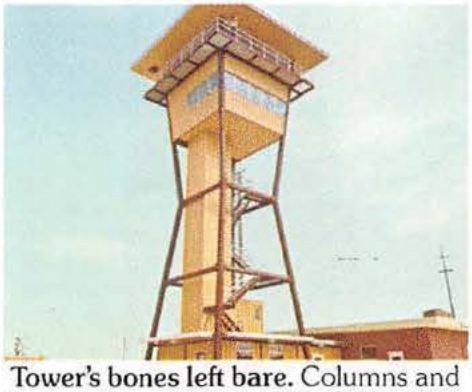


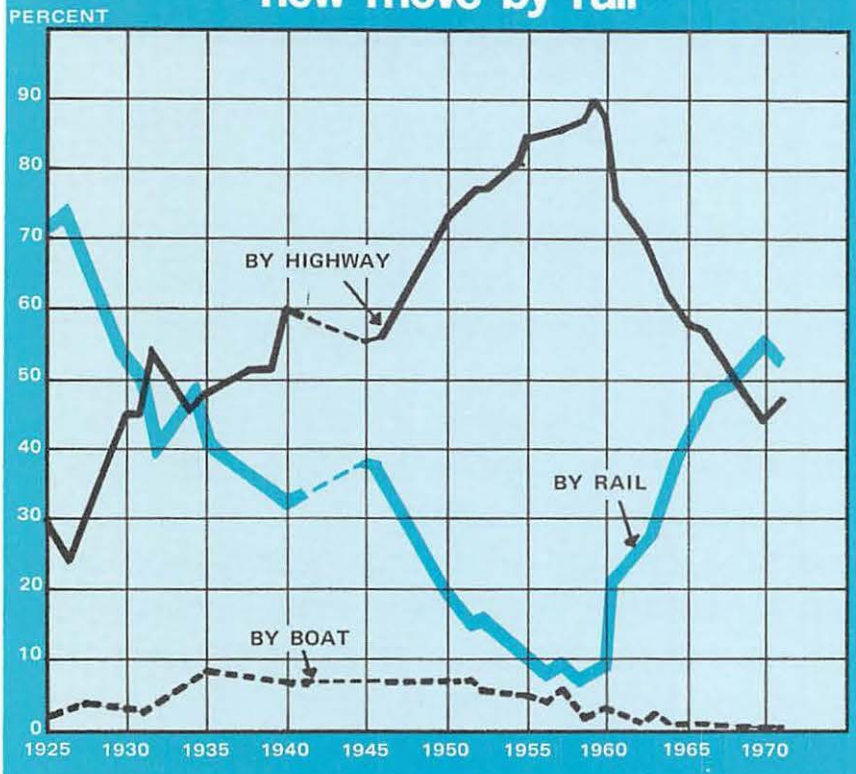
Weathered beauty for BART. Part of the new system to serve San Francisco and environs, station and supporting bridge are bare USS COR-TEN Steel.



Tower's bones left bare. Columns and beams of unpainted USS COR-TEN Steel support this 70-foot tower in the Santa Fe yards, Kansas City, Kansas.

'61 stainless liner still tiptop. No corrosion loss: that's the verdict on these quick-emptying hopper-floor sheets of USS Type 302 Stainless Steel.

More than half of new autos now move by rail



Method of Shipping Motor Vehicles

Year	HIGHWAY Number (000)	HIGHWAY Percent	RAILROAD Number (000)	RAILROAD Percent	WATERWAY Number (000)	WATERWAY Percent	Total Motor Vehicles Shipped (000)
1952	4,321	78.0	840	15.2	377	6.8	5,539
1953	5,712	78.0	1,115	15.2	496	6.8	7,323
1954	5,315	80.5	916	13.9	370	5.6	6,601
1955	7,549	82.4	1,141	12.4	479	5.2	9,169
1956	5,859	84.7	760	11.0	301	4.3	6,921
1957	6,160	85.3	661	9.2	399	5.5	7,221
1958	4,463	86.9	508	9.9	164	3.2	5,135
1959	6,056	90.0	538	8.0	134	2.0	6,729
1960	6,862	87.2	763	9.7	244	3.1	7,869
1961	5,127	76.8	1,369	20.5	180	2.7	6,677
1962	6,024	73.7	2,059	25.2	90	1.1	8,173
1963	6,413	70.8	2,521	27.7	136	1.5	9,100
1964	5,724	61.6	3,550	38.2	18	0.2	9,292
1965	6,512	58.9	4,445	40.2	100	0.9	11,057
1966	5,588	54.1	4,721	45.7	20	0.2	10,329
1967	4,614	51.4	4,344	48.4	18	0.2	8,976
1968	5,445	50.8	5,252	49.0	21	0.2	10,718
1969	4,891	48.2	5,246	51.7	10	0.1	10,147
1970	3,732	45.3	4,507	54.7	0	0.0	8,239
1971	5,053	47.5	5,585	52.5	0	0.0	10,638

SOURCE: Automobile Manufacturers Association.

train is the final answer; maybe something along the order of a special train will be able to do the job for us."

GM detects a definite relationship between transit time and in-transit damage—"the longer it takes to ship an automobile, the better the chances for it to get damaged" is the way Vic Long puts it. Then he goes on to cite the Kansas City-Chicago auto-rack train as an example of the time-damage relationship. "Before this unit train was developed, dealers in Chicago were claiming that somewhere between 25-50% of our units arriving from the two Kansas City plants were damaged," he continues. "The rack cars were going through the Kansas City yards and also through one in Chicago. Now, the train starts out at one of the Kansas City plants, moves directly on to the second one, misses the yard there as it proceeds on to Chicago, where it goes directly to the unloading ramp without stopping in any yard there.

"Transit time has been cut from 4-5 days to second morning delivery, and dealers tell us that the damage problem has been cleared up. That's the best proof we have of the time/yard relationship to damage."

Unfortunately, it appears that a definite relationship exists between damage and the railroad industry's share of the sizable GM transportation dollar. Generally, railroads will haul about 20 million tons of GM-generated traffic yearly. After virtually fumbling and bumbling themselves out of the new vehicle transportation market in the late '50s, the railroads made a colossal comeback in the '60s and actually won over better than 50% of the market. In-transit damage, however, seems to be rearing its ugly head and is, in fact, gnawing away at the rails' hard-won share of the new automobile traffic.

The railroad share of the GM new car traffic dipped by nearly 3% in the 1970-1972 model years. From all indications, the 1973 model year won't see a recovery of this lost traffic. An excessive amount of damage encountered in moving automobiles semi-exposed aboard auto rack cars is partly responsible. Government, especially the U.S. Senate's Select Committee on Small Business, has been vitally interested in determining how to prevent theft, vandalism and damage to vehicles moving by rail to dealers, and has queried GM on what is being done to deliver factory-fresh units. There is no doubt but what damage is a very sensitive subject around Detroit.

The computer is being used to good advantage by GM and the railroads serving the giant automaker's far-flung operations. Computerized car tracing has been used effectively for the past year-and-a-half to help speed new automobiles to their destinations and thereby remove them as quickly as possible from an environment where they might encounter damage. All auto rack cars serving GM operations are being monitored by the computer system. Movements of box cars serving three GM fabrication plants are also under the surveillance of this system. Long explains that an "exception-type" computer report is generated on the car movements. This means that all cars that do not follow the routing and time schedule established for them are flagged by the computer. The errant car is then tracked down and steered back on its proper route, with a minimum loss of time.

GM has established a ramp manager program to help fight against damage and to improve the entire transportation package. Ramp managers are stationed

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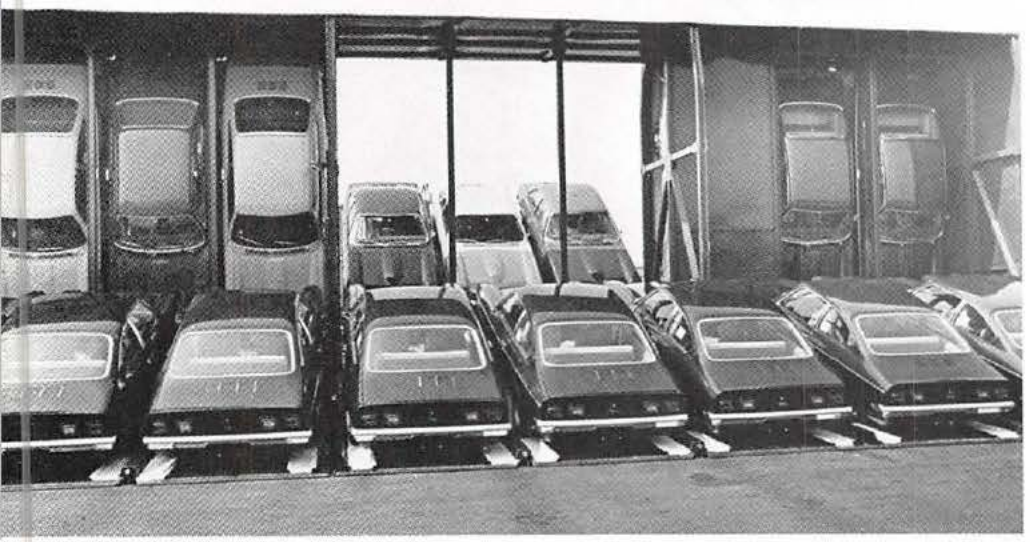


VERT-A-PAC RAIL CARS for hauling General Motors' automobiles will number 410 by the time the 1973 model year begins for the subcompact Vega.

in over 30 key cities. Part of their job involves directing unloading, dispatching and transfer of new automobiles to dealers and customers. On-time delivery, which ranks second in importance only to damage-prevention in the eyes of the GM Logistics Staff, is another thing the ramp manager works to achieve. The car-tracing system is a valuable tool in achieving this goal, with the ramp manager using it to *pull* the freight cars toward his area, while Logistics' headquarters staff is using the same report to *push* them to destination on time. The ramp manager also sees to it that a steady stream of empty cars is kept flowing back to loading points, thus strengthening the supply of cars.

The importance of the ramp manager in improving the flow of cars to and from unloading points can't be minimized. But, it is really the unit train that is making the greatest contribution to better freight-car utilization, admits Long. One railroad, he continued, found that it could actually retire 90 aging auto racks and not have to replace them with new equipment, simply because car utilization had reached such a vastly improved level that replacement was unnecessary.

He was quick to point out, however, that while it is unlikely that the fleet of auto rack cars serving GM will have to be expanded in the 1973 model year, the fleets of 86-foot and 60-foot box cars serving fabrication and assembly plants will probably have to be expanded somewhat. Long credits improved utilization of the car fleets with keeping new-equipment requirements to a much lower level than might normally be established.

Even if improved utilization had not come along to cut auto rack requirements, GM probably would not have made a strong pitch for expansion of the auto rack fleet. Nor will GM be making any strong demands for shielding on the sides of auto rack cars, says Long. About 400 of the 8,000 auto rack cars assigned to GM are equipped with side protection panels. While GM would not turn down any railroad offers to panel more auto racks, there are no firm plans being made to request them. Obviously, GM is looking for full protection of the automobile—in a closed car, or container—and the partial protection offered by side protection panels does not fit into the automaker's long-range plans.

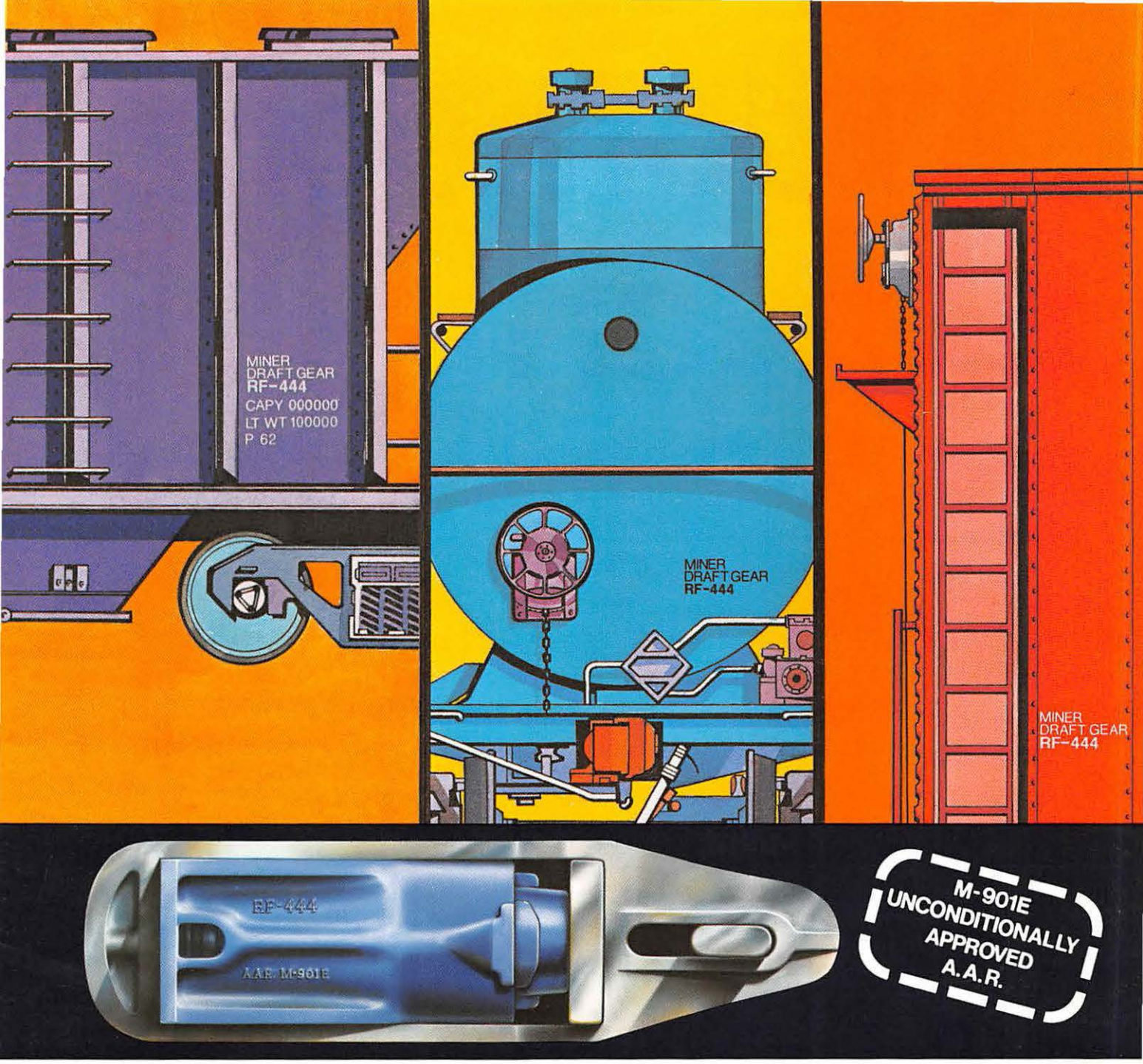
There is no need to fear that the entire fleet of over 24,000 auto rack cars is about to be phased out, Long emphasizes. This multi-million-dollar investment is definitely not in jeopardy. The rack car itself is fully capable of handling containers like Stac-Pak, with minor adaptations. Racks, on the other hand, would have to be phased out. Unlike the flat cars—"which seem to go on forever"—the racks have a life span of only about eight-to-ten years, according to Long, and they will be coming due for replacement or complete rebuilding on a continuing basis year after year. GM, of course, would like to see these racks replaced with something which would provide more complete protection for the automobile on its way to the customer.

GM, in cooperation with a number of railroads, has several programs in early stages of development that are aimed at improving the transportation of automobiles by rail. There are many ideas, too, that have been tried and rejected. For example, in one early effort a car was designed that was similar to Vert-A-Pac, but would haul standard-size automobiles rather than subcompact Vegas. Unlike the Vert-A-Pac, however, which hauls the Vegas nosedown, this new design would have had the standard-size automobiles locked on the hinged car doors in such a way that when the doors were raised and locked, the automobiles would be riding two abreast with their sides down. Ultimately, this concept gave way to Stac-Pak.

A Stac-Pak container that will load five per car and each carry three standard-size automobiles seems to have more promise. Many of the features of the existing Stac-Pak, which loads four containers per car with three of the larger Cadillac-size automobiles per container, are being incorporated in the new Stac-Pak design.

Although Stac-Pak—or something similar to it—seems to be the direction in which GM hopes future rail vehicles will develop, the Vert-A-Pac seems to be rather secure so far as transportation of the Vega is concerned. Styling of the subcompact Vega may be altered to fit the whims of the motoring public, but basic dimensions should remain relatively unchanged. Things like the wheel-well spacing in the hinged sides of the Vert-A-Pac will be given full consideration when designing future Vegas, Long says. If, however, future Vegas should be required to have some type of energy-absorbing bumper, no problem will be encountered because the Vert-A-Pac has sufficient floor-to-roof space to accommodate a certain amount of lengthening of the automobile. It is felt, too, that the Vert-A-Pac has sufficient weight-carrying capacity to continue to haul 30 Vegas fitted with energy-absorbing bumpers, Long added.

General Motors looks for the railroads to play an increasingly important role in its transportation plans. A sincere desire on the part of the railroads "to work with us in solving problems" is the thing that sticks out in the mind of Milford Barron, former immediate head of the Logistics Staff who is now executive in charge of Production Control, Procurement and Logistics for GM. He cites the unit train concept of moving automobiles and parts and the car tracing program as examples of what GM-railroad cooperation has been able to accomplish. He says GM is keenly aware of the money-shortage handicap under which some railroads must operate. This particular problem is one to which GM gives full consideration before embarking on any kind of transportation-improvement program. GM has seen a definite improvement in the manner in which "the railroads have been minding their business" in the past two years, and the mutual cooperation used in attacking and solving problems of the past is being employed to gain even more important results for the present and future development of automobile transportation by rail. ■



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Fax finds widening role on railroads

NEW FCC RULING permits facsimile transmission via radio to surface transport vehicles.

Facsimile usage by railroads is becoming fairly widespread, and some growth is certain. If transmission speeds over conventional telephone circuits can be increased, and if manufacturers' equipment becomes compatible, the growth rate will probably rise rapidly. These conclusions are drawn from a Railway Age survey of 13 railroads (all Class I) that are using facsimile equipment.

● **Two major usage areas.** Facsimile is finding widespread use in intra-terminal offices. Chesapeake & Ohio, for example, uses facsimile for data collection and dissemination. Switch lists, work orders, car inventory and per diem reports are transmitted between yard offices. Yard situation reports, empty car information and disposition of empty equipment for local industries as well as train consists of locals are sent by facsimile.

Inter-city facsimile transmission is of such things as correspondence reports, forms and messages among executive, regional and division offices on the C&O. Similarly, Penn Central has facsimile units strategically located at Philadelphia headquarters and in region and division offices. They are available for use by all departments. Major usage is for handling daily reports and administrative messages.

Illinois Central uses facsimile in preference to its computer-switch tele-

(Continued on page 34)

BUYER'S GUIDE TO FACSIMILE SYSTEMS

Model 400 mobile facsimile system operates automatically and unattended. The receiver in a mobile vehicle operates from the vehicle's VHF radio system. All graphic material up to 3 9/16 in. wide by any length can be received on the **Alden Electronic & Impulse Recording Equipment Co.** model 400 facsimile system.

Century's model 731 facsimile recorder provides 8 in. of recording on 8 1/2-in. paper on a 250-ft roll. This **Century Electronics & Instruments Inc.** system records essentially permanent continuous tone black to white at a minimum of 10 shades of gray.

Videofax can send standard 8 1/2-in by 11-in. documents in 17 seconds. This **Datalog, Litton Systems Inc.** facsimile system requires a 48 kHz communications channel.

The **Graphic Sciences Inc.** dex line of facsimile equipment sends and receives documents up to 9 in. by 14 in. by telephone circuit. Transmission time is 2 to 6 minutes.

Magnavox Systems Inc. facsimile models 850, 854 and 856 can be operated to provide fully unattended reception of copy. An alarm is provided to signal the end of document transmission on these units. At the transmission end, an auto dialer can dial over the telephone network using 1 to 20 preselected numbers to call receiving units.

Muirhead Inc.'s Mercury IV mobile facsimile system permits using graphic and photographic information on existing radio channels. Recording is done automatically on a 100-ft roll of paper tape at the receiver.

The **Speed-O-Fax Corp., system** consists of separate transmitter and receiver units which handle 9- by 12-in. documents with an image area 8 1/2 in. wide. Recording paper is dry, black and white continuous roll 275 ft long. Transmission time is about 6 minutes for a standard document.

Stewart-Warner Corp., has introduced the Datafax 180 facsimile transmission system which features automatic operation and is fully compatible with Xerox and Magnavox facsimile units. The Datafax 180 works on phone lines. An automatic loader holds up to 50 documents for transmission without operator attention.

Copyphone model 900 facsimile system will transmit an 8 1/2-in. by 11-in. document over leased phone lines in 1.2 minutes. Made by **Telautograph Corp.,** model 900 receives the facsimile copy, automatically cuts it to the size of the original and stacks it.

Victor Graphic Systems Inc. facsimile system can send a photograph over dialed or WATS telephone lines in 6 minutes. Transmission time is 3 minutes for a standard 8 1/2-in. by 11-in. document. Wideband communications circuits can cut document transmission time to 1.1 minutes.

Xerox Corp.'s model 400 Telecopier (weight 18 lb) can transmit a normal letter-size document in 4 minutes. Model 400 operates on 120 volts ac. Transceiving speed is 3 in. per minute.

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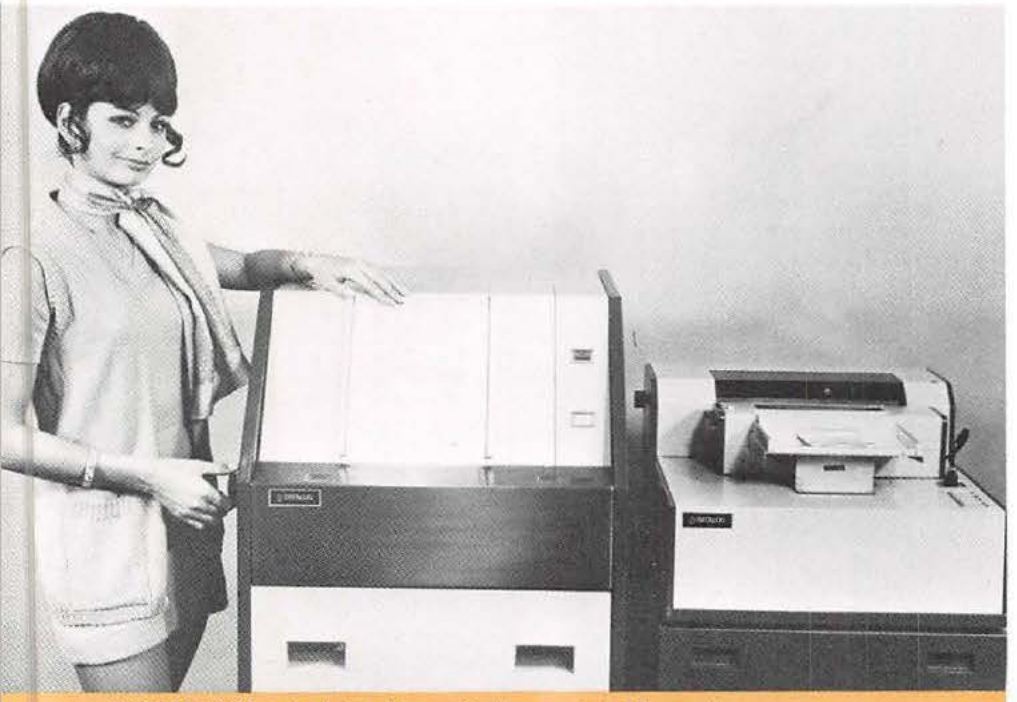

VIDEOFAX (Datalog, Litton) transmits documents in 17 seconds

GRAPHIC SCIENCES equipment sends and receives via telephone circuit.

UNATTENDED RECEPTION is feature of Magnavox Systems facsimile equipment.

(Continued from page 31)

printer network for two main reasons: (1) Documents, such as machine drawings, can be transmitted via facsimile, but not on teleprinter. (2) At some locations, workers skilled in typing are not immediately available. IC has facsimile equipment at general headquarters of operating and mechanical departments which communicate with about a dozen outlying locations.

● **Fax between railroads.** Some railroads, among them the Milwaukee Road, Norfolk & Western, Santa Fe and Union Pacific, used facsimile to exchange consist lists of cars interchanged. Specifically, the Milwaukee and N&W exchange lists of cars interchanged between yards in the Chicago area. At Kansas City and Dallas, Santa Fe sends via facsimile to other railroads involved reports relating to interchange of freight cars. At Seattle, UP uses facsimile for interchange of documents with other railroads.

Chicago & North Western, which uses facsimile at Chicago, Milwaukee and the Twin Cities, has found portable fax units to be helpful when required to transmit special reports from remote locations to Chicago to keep management informed of car-order requirements and utilization.

● **Waybills via fax.** Southern is using high-speed facsimile (Long-Distance-Xerography or LDX) from 38 locations into Atlanta, Ga. Also, one slow-speed, duplex facsimile transmission system is in service between Washington, D.C., and Atlanta.

Copies of waybills are transmitted into Atlanta. From the waybill, information for car movements, billing, etc., is extracted by key punch operators, and is used as input for the computer. This LDX facsimile will transmit about 12 waybills per minute. Transmission is over microwave and requires the equivalent of 62 voice channels. The slow-speed facsimile is used for transmitting messages and operates over a voice channel.

Southern plans to expand its LDX facsimile transmission into Louisville, Ky., Princeton and Huntingburg, Ind., East St. Louis, Ill., and Altavista, Va. this year. In the near future, LDX will be expanded into Sheffield, Ala., and Memphis, Tenn.

● **Speed is a factor.** Most facsimile systems operate over a voice channel or telephone circuit and send an 8½-in. by 11-in. document in 2 to 6 minutes. Shorter messages take less time. Some facsimile systems can send a standard sheet of typewritten material in one minute. This takes a higher-speed circuit and is more costly.

Work is under way by manufacturers to provide equipment that can operate over the conventional telephone or voice channel and send an 8½-in. by 11-in. document in about one minute.

A recent decision by the Federal Communications Commission permits teleprinter and facsimile transmissions via radio in land transportation services. Thus, railroads can equip automobiles, trucks, locomotives, cabooses and business cars with facsimile units. This will enable occupants to receive written messages and instructions while they are away from their offices.

One possible usage would be to send, in an emergency, drawings, circuit plans, or maintenance instructions to a repairman out in the field to help him correct a malfunction of motive power, signals, or m/w equipment.

Railroads responding to the survey said they are continuing to investigate other areas for facsimile usage. If speeds can be increased for use on conventional telephone circuits, it could be an impetus for increasing usage. Also, expansion to usage by field forces operating on mobile equipment can portend a larger market for manufacturers. ■

2¢

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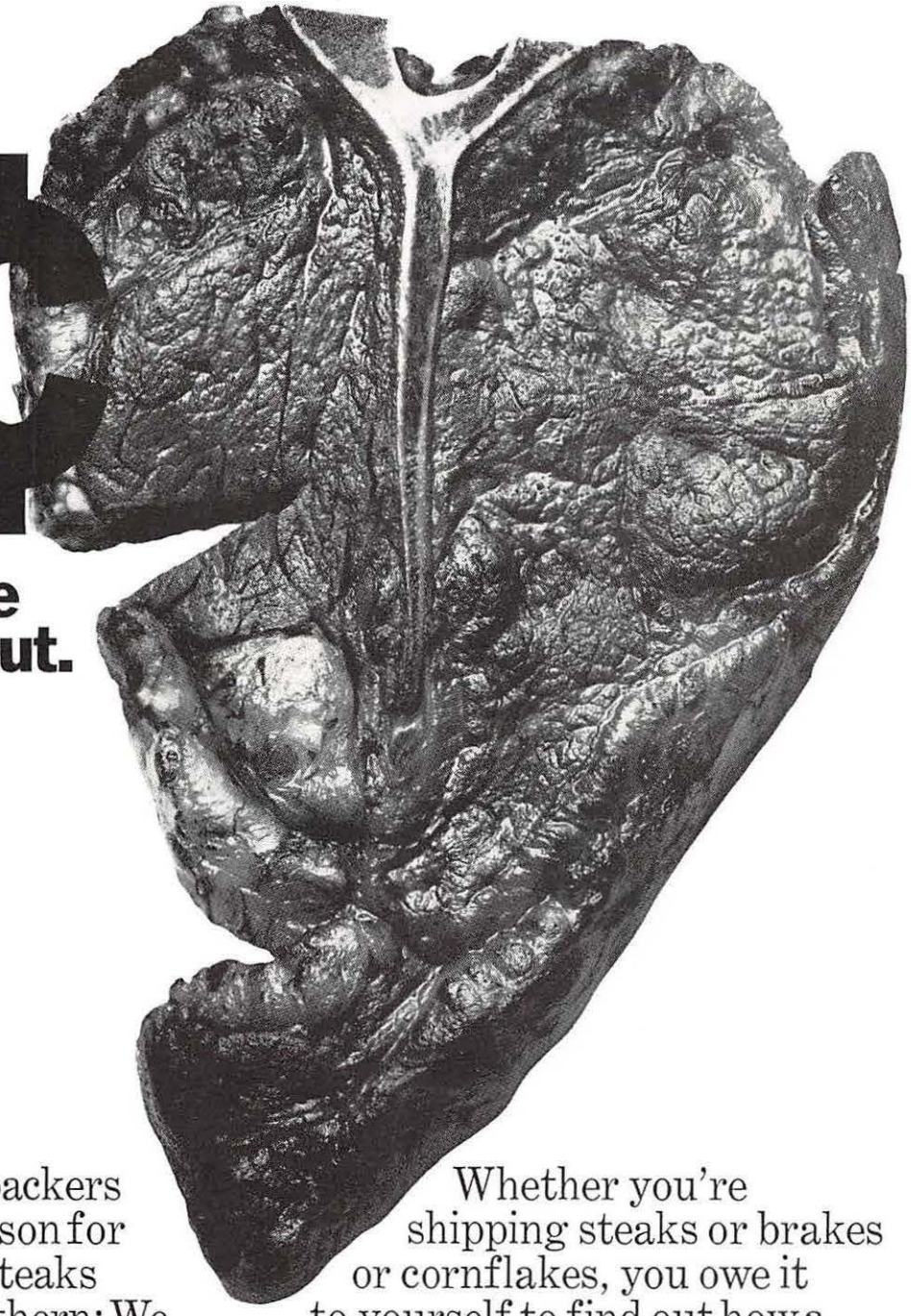

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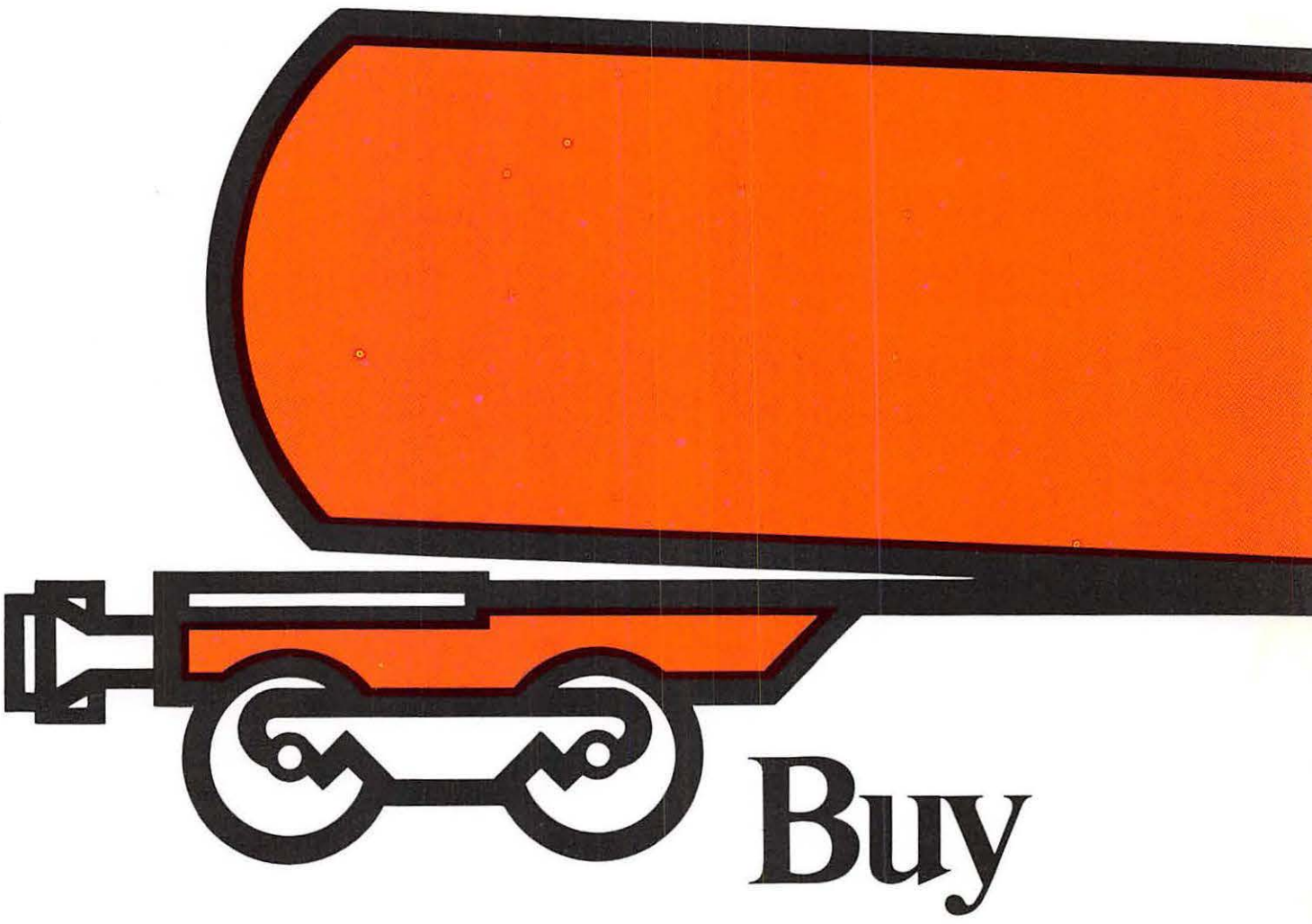

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Circle 17 on coupon page 48A

High-dispersancy lubricant pays off for Grand Trunk

A complete switch to a high-dispersancy lubricating oil as part of a comprehensive preventive maintenance program has enabled a Midwest railroad to reduce power assembly changeouts by 30% and save an estimated additional $9,000 a year through increased filter life.

These developments have meant that 202 diesel locomotives spend less time in the shops and more time delivering payloads for the 946-mile Grand Trunk Western.

Dr. Robert A. Bandeen, who became president of GTW in 1971, travels the line in his business car to observe operations first hand, discuss railroad activities with employees, and to personally promote modern cost/efficiency concepts on the railroad wherever he can.

In this regard, the change to a high-dispersancy lubricating oil, Shell Tornus Oil 40, enables the railroad to obtain longer service from its engines. The evolution of this modern oil really began shortly after World War II. At that time as railroads were converting from steam to diesel there came a demand for lubricating oils with inhibitors and detergents to provide longer oil life and to keep engines running cleaner.

GT changed, as did other railroads, from a straight mineral oil to reprocessed crankcase oil. The next step was to a standard type of oil (such as Shell Talona) which had a greater reserve of alkalinity, plus compatibility with the silver trunnion bearings used in EMD locomotives.

About four years ago, GTW started using Shell Tornus Oil, a heavy duty diesel engine lubricating oil designed especially for high-horsepower engines. Tornus is a medium-viscosity-index oil with a high-dispersancy additive package for resisting formation of carbon, sludge and varnish deposits.

In reaching the decision to use Tornus Oil, the railroad received considerable technical support from Shell whose representatives and application engineers assisted GTW in setting up a locomotive crankcase oil monitoring system at Battle Creek, Mich., to spot potential trouble areas before they could cause major problems.

Shell also provided technical consultation which enabled GTW to monitor oil conditions so that oil and oil filter service intervals could be safely extended. Samples of crankcase oil from every GTW engine are tested every 30 days in conjunction with scheduled maintenance.

Regardless of where an engine might be in operation, a sample of the oil is taken 10 days before the established 30-day maintenance schedule. This sample is forwarded to Battle Creek. By the time the engine returns there the maintenance force is well aware of the oil's condition. GTW's mechanical department is headed by Del M. Bressett, chief mechanical officer, and Harry Calladine, mechanical officer, motive power.

Three steps are included in the Grand Trunk program for evaluating oil samples:

—Shell ADC blotter spot test: This test quickly determines alkalinity level of the oil, whether the oil has lost its dispersancy and whether it is excessively contaminated. It is performed by placing drops of oil on special filter papers. The color and pattern of the spot formed can then be interpreted by an experienced tester by comparison with previous spots from the same locomotive and with typical spots furnished on the ADC (Alkalinity, Dispersancy, Contamination) analysis instruction sheets. GTW officers said the test has been extremely helpful in quickly alerting maintenance personnel to problem areas. It enables an evaluation of the oil to be made while the locomotive is in the maintenance shop. When a potential problem area is spotted, the shop is notified and the unit detained until two other tests can be made.

—Viscosity: By this procedure the oil is analyzed to evaluate whether thickening caused by excessive oxidation or thinning caused by fuel dilution could have occurred.

—Atomic absorption spectrophotometer: This device determines potential sources of problems that could be caused by water leaks, poor air filtration, excessive wear of bushings, silver bearings, or other critical metal parts.

The railroad's new Perkin-Elmer Model 403 with digital readout is used for this analytical oil test. It can be set up to print directly the concentrations of various critical metals in the oil.

Although the scheduled oil change interval was 12 months for a number of years, oil is now changed on the basis of its condition. Premature oil changes often had been necessary due to oil deterioration. This oil loss and added servicing have been virtually eliminated since the changeover to the second-generation oil.

This oil also has provided a greater margin of safety near the end of the oil drain interval. The viscosity increase is controlled within limits and the oil has a positive base number at change. Engines have been freer of carbon, sludge and varnish deposits.

As a result, power assembly changeouts have been "reduced by about one third since we began using Shell's Tornus Oil on our system," reports Calladine.

Along with the railroad's change to Tornus, the service life of the multiple oil filters in each engine has been extended from 60 to 90 days. This lowered annual costs for filters and decreased labor costs and oil loss.

At the regularly scheduled 30-day maintenance periods, the condition of engine and electrical components is evaluated, records of oil consumption are studied, engineers' reports and other performance statistics are also considered.

In addition, every other maintenance period—every 60 days—each engine is given a routine air box inspection and the deposit condition is evaluated. Piston rings and liners are also given cursory inspection through the inlet air ports.

At present, engines are completely overhauled in GTW's well-equipped shop and power assemblies replaced between 300,000 and 600,000 miles, depending on the type of service. To make a comprehensive analysis of the performance of Shell Tornus since changing to this oil, Grand Trunk pulled in Engine Number 5903 which had been using only this oil since its purchase in 1969. This EMD SD40 had traveled more than a quarter-million miles in freight service.

The two-stroke, turbocharged General Motors engine has 16 power assemblies and seven oil filter elements. Inspections had shown the No. 2 power assembly to be representative. It was chosen for disassembly. This teardown

ENGINE NUMBER 5903, a turbocharged EMD with 16 power assemblies, is carefully analyzed in the Grand Trunk's main shops in Battle Creek, Mich. The special study confirmed that the high dispersancy oil used exclusively in the engine since its purchase in 1969 had kept the engine clean and had protected such critical parts as silver wrist pin bearings and lead overlay on main bearings.

BLOTTER SPOT TEST is made by Chemist Al Klammer to determine the alkalinity level of the oil, whether the oil has lost its dispersancy and whether it is excessively contaminated. This test enables an oil evaluation to be made while the locomotive is in the maintenance shops. Samples are tested every 30 days. If the Shell ADC(R) Blotter Spot test indicates potential trouble, the shop is notified and the locomotive is detained for further testing.

confirmed that the oil had performed well in keeping the engine clean and in protecting such critical parts and the silver wrist pin bearings and the lead overlay on the main bearings.

Calladine reported the following summary:

—Cylinder lines: Appearance good, indications that control of wear was excellent; no measurable shoulder; hone marks still visible.

—Cylinder head: Appearance indicative of good combustion with no carbon buildup; exhaust ports very clean; valve stems showed little wear with no deposits on valve seats.

—Piston: "Extraordinarily clean" with clearance between top ring and piston land of only 0.008 inches, well within accepted tolerances; oil rings were clean with no plugging; bottom of piston skirt showed no laquer or scuffing.

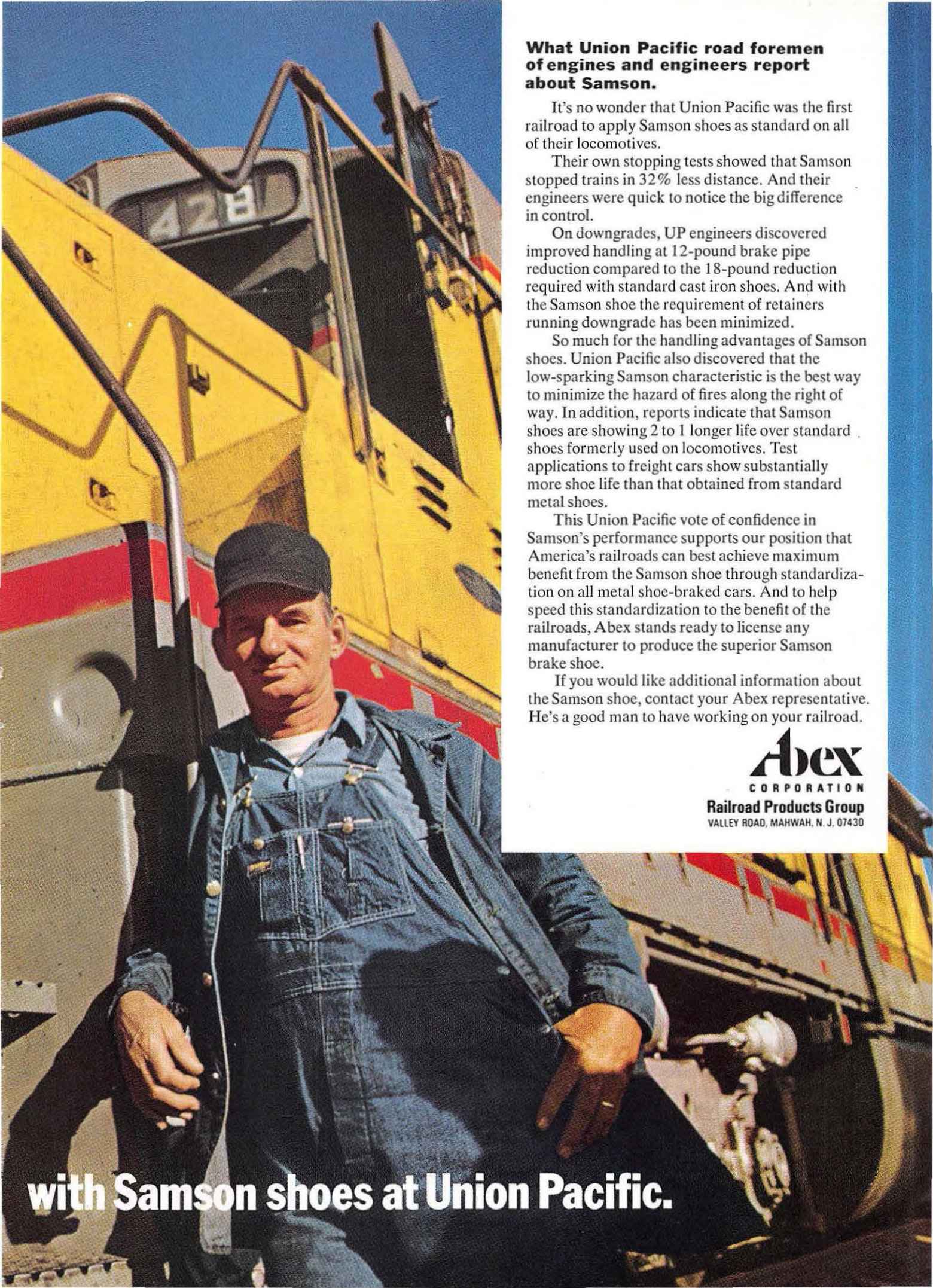
—Piston undercrown: No deposits that could cause piston cooling problems.

—Liner exterior: No deposit buildup or port restrictions that could interrupt air supply required for normal combustion.

—Silver bearings: Perfect condition; no feathering of metal in oil grooves.

—Oil filters: No signs of sludge on the surface. "Tornus is doing an excellent job and gives us remarkably good performance," concluded Bressette. ■

We get better braking control and shorter stops



What Union Pacific road foremen of engines and engineers report about Samson.

It's no wonder that Union Pacific was the first railroad to apply Samson shoes as standard on all of their locomotives.

Their own stopping tests showed that Samson stopped trains in 32% less distance. And their engineers were quick to notice the big difference in control.

On downgrades, UP engineers discovered improved handling at 12-pound brake pipe reduction compared to the 18-pound reduction required with standard cast iron shoes. And with the Samson shoe the requirement of retainers running downgrade has been minimized.

So much for the handling advantages of Samson shoes. Union Pacific also discovered that the low-sparking Samson characteristic is the best way to minimize the hazard of fires along the right of way. In addition, reports indicate that Samson shoes are showing 2 to 1 longer life over standard shoes formerly used on locomotives. Test applications to freight cars show substantially more shoe life than that obtained from standard metal shoes.

This Union Pacific vote of confidence in Samson's performance supports our position that America's railroads can best achieve maximum benefit from the Samson shoe through standardization on all metal shoe-braked cars. And to help speed this standardization to the benefit of the railroads, Abex stands ready to license any manufacturer to produce the superior Samson brake shoe.

If you would like additional information about the Samson shoe, contact your Abex representative. He's a good man to have working on your railroad.

Abex
CORPORATION
Railroad Products Group
VALLEY ROAD, MAHWAH, N. J. 07430

JUNE TRAFFIC POLL

Railway Age asked 55 leading shippers: What disturbs you most about the railroad picture today? Are you more—or less—hopeful for the future of railroading than you were a year ago? This is what they said.

"What bothers me most as a railroad

"Lack of public understanding of importance of the railroad system; tendency of Congress and public to continually picture American railroads as passenger carriers."—C.J. Harriss, vice president transportation, Continental Grain Co., New York.

"The continued low return on investment earned by the railroad industry—about 2½%. Few industries can attract private capital with such low returns. Unless this low return can be at least doubled during the next 10 years, I see a multitude of railroad failures or nationalization, either of which would be lamentable. Industrial shippers need the railroads because rail freighting is intrinsically more economical than truck or air, and marine freighting is not often available. Nationlized rail is a poor prospect for the future because most world evidence reflects waste in government operated enterprises."—J.M. Benson, distribution manager, Hiram Walker & Sons Limited, Walkerville, Ont.

"That railroad people are joining the ranks of those who have lost the sense of accomplishment of a job well done. This statement is made because of recent instances of lack of advice for as much as 10 days on cars delayed for bad order and the general lackadaisical approach in explaining the shortcomings which are pointed out."—F.E. Juranek, general traffic manager, Clark Equipment Co., Battle Creek, Mich.

"That railroads will not be able to generate or attract sufficient capital to enable them to innovate new operations and maintain and improve existing plant."—Carl N. Hayes, general traffic manager, Norton Company Coated Abrasive & Tape Divisions, Troy, N.Y.

"The financial plight of the majority of rail carriers and the slowness of getting some firm legislative relief which would be agreeable to both the carriers and the shipping public."—R.H. Heilman, corporate director of transportation and distribution, A.O. Smith Corp., Milwaukee, Wis.

"The financial conditions of the Eastern lines and the threat of government takeover."—E.B. Kelsey, traffic manager-rail service, Container Corp. of America, Carol Stream, Ill.

"The seeming inability to get legislation through Congress that will help the rail carriers in areas of taxes, abandonments, loan guarantees and labor stability."—D.C. Ward, director of transportation, Hoerner Waldorf Corp., St. Paul, Minn.

"The inability to obtain much needed transportation legislation... Despite the various bills before Congress we seem unable to reach compromises necessary to get such legislation out of committee and onto the floor for a vote."—J. Robert Morton, vice president-corporate transportation, Combustion Engineering Inc., Stamford, Conn.

"Short-sighted railroad management. We don't want to know why we can't do it, but how we can do it."—John H. King, general traffic manager, Georgia Pacific Corp., Portland, Ore.

"The continued railroad attitude that their problems are all created from outside sources, when, as repeatedly shown, they are wholly created from within. In order to view this fact from an unbiased viewpoint one has but to investigate the plight of the Western Pacific before good management took over and that of the Katy—same problems, same solutions. To deny that management caused the Penn Central fiasco is to shut one's eyes to the facts."—John A. Lynch, general traffic manager, Missouri Portland Cement, St. Louis.

"The attitude surrounding the operation of many railroads, particularly in the East. This 'Alamo' or 'Back to the Wall' morale condition is reflected from top management down to the marketing man on the street. Instead of surrendering to the forces of government takeover and the other ills besetting them, railroad management must generate a new progressive spirit and particularly greater production in the form of much faster in-transit time—and do it now."—D.H. Shaw, manager, traffic and transportation, Harbison-Walker Refractories, Pittsburgh.

"The labor problem. The railroads for years have been faced with labor crises, strike dates are set; freight is diverted to other modes; a last minute court injunction averts the strike (most of the time). Then a costly settlement is made and rates are increased. In a period of moderate economic upswing, the growth will enable the carriers to show a modest profit. However, should the economy turn down, the railroads will still be saddled with a greater cost level that may well force more of the marginal operators over the brink into bankruptcy. This would undoubtedly raise the nationalization banner higher on the flag pole. Legislation must be enacted to correct this one-sided situation."—R.C. Devenney, general traffic manager, New Holland Division of Sperry Rand, New Holland, Pa.

"The fact that the railroads are unable to compete for our industry's 35-billion pounds annual volume, which moves regularly each week throughout the year. A recent survey showed approximately 90% or more of this volume being transported by motor carrier, primarily because they are providing faster service and, amazingly, at the lowest cost."—Robert A. Propf, director transportation and distribution, Geo. A. Hormel & Co., Austin, Minn.

"The failure of railroads as an industry to take innovative steps to retain and increase their share of the traffic moving. This applies to both operational considerations and pricing."—Clyde L. Jacobs, manager of transportation, Crown Zellerbach, San Francisco.

"The continual decline in the number of rail cars and the seeming inability of the carriers to slow down this decline. Somehow, this situation must be reversed or the rails will continue to lose tonnage."—Robert B. Reedy, manager transportation pricing, analysis, and adjustment, Vulcan

J. Robert Morton
Combustion Engineering

"...the inability to obtain much needed transportation legislation"

shipper is this..."

Materials Co., Birmingham, Ala.

"The box car supply and the slowness of Congress to enact legislation that would insure adequate cars."—August Heist, general traffic manager, R.J. Reynolds Tobacco Co., Winston-Salem, N.C.

"Car supply and terminal service. Our company annually loads approximately 30,000 car loads of compressed cotton. Cotton is generally loaded in 40-ft, high-roof cars. Some of the rates apply in 50-ft cars at a higher minimum weight. Although we try to keep careful watch, we haven't noticed a railroad car order that includes 40-ft equipment in many years. Every year the supply of these cars diminishes and obviously some corrective action must be taken."—G.M. Powell, vice president, Federal Compress & Warehouse Co., Memphis, Tenn.

"The rapid deterioration of railroad service and equipment. An example of the poor service is the movement of carloads of sand from Millville, N.J., to ourselves at Birdsboro, Pa. (10 miles east of Reading) taking six to eight days in transit. In some cases it has taken 10 to 12 days. We could walk this distance in less time. A distance of 90 miles is involved."—J.L. Miller, manager of traffic, Birdsboro Corp., Birdsboro, Pa.

"Continuing problems of service and equipment. Service remains erratic—not dependable for meeting deadlines. Between given points, service time varies by many days. Also, we are continually plagued with shortages of equipment."—J.D. Robins, director of traffic, Caterpillar Tractor Co., Peoria, Ill.

"The railroads' failure to work together to provide the shipper with dock to dock service competitive with motor carriers—their failure to properly communicate with shippers and provide reasonable explanations for some of their docket proposals—and their failure to work with shippers in the development of sound and compatible legislative reforms so necessary for their economic well being and for fulfullment of the needs of the shipping public."—W.E. Harvey, general traffic manager, Swift Fresh Meats Co., Chicago.

"Lost cars. No bills. Car shortage. Tariffs in bad shape. You must check a base rate, then increases X-256, X-259, X-268, X-265, X-267, X-281. No two rate clerks come up with the same rate."—L.A. Gossage, traffic manager, Herbert Materials, Nashville, Tenn.

"The unwillingness of most carriers to invest in equipment, causing shippers to own or lease cars. Adequate allowances should be made for shippers owning or leasing such cars. Concentrated efforts should be made to improve service on other than main lines."—Robert J. Kearney, general traffic manager, the Celotex Corp., Tampa, Fla.

"Our inability to obtain first-class boxes as need arises. At the present time a shortage exists on the Burlington Northern and Milwaukee Road in our territory."—N.C. Kunzmann, traffic manager, Georgia-Pacific Corp., Bellingham, Wash.

"High rates. Poor service. Obsolete cars."—E.V. Gates, traffic manager, New York Air Brake Co., Watertown, N.Y.

"The continuing shortage of general purpose box cars and the attitude of railroad management toward the need for these cars, especially at port cities for switch moves. Shippers at port cities and also interior points who use these cars for switch moves cross-town find railroads very unsympathetic. All of the money is spent on 'specialized' equipment which cannot be used in switch service."—Lloyd C. Philips, traffic manager, Riviana Foods Inc., Houston, Tex.

"The alarming number of box cars we reject as 'unfit for loading'."—J.J. D'Arcy, general traffic manager, Congoleum Industries, Kearny, N.J.

"The fact that railroads are outpricing themselves. They have been granted relief from passenger trains, relief from full crews, Congressional intervention on abandonments, yet all in sight is increases. Private carriage will grow on general commodities leaving only cargo unattractive to private carriage."—J.A. Illes, director of transportation, Outboard Marine Corp., Waukegan, Ill.

"As a shipper and/or receiver of over 30,000 carloads via rail per year, I'm concerned with continually rising freight rates due to the inability of railroads to increase labor productivity. Wage increases have to be tied to work rule changes effective now, not later. Strike legislation is a necessity for the entire transporation industry to maintain stability of our national economy. We have many profitable, progressive railroads, especially in the West and the South. Therefore regional increases are essential rather than ex parte general increases on a national basis."—E.S. Rosenzweig, traffic manager, Longview Fibre Co., Longview, Wash.

HOW SHIPPERS SIZE UP THE FUTURE p. 46 ▶

R.H. Heilman
A.O. Smith Corp.

"...the financial plight of the majority of the carriers"

E.S. Rosenzweig
Longview Fibre Co.

"...the inability of railroads to increase labor productivity"

How to blanket a market and save 37% in freight charges.

Try our intermodal "Pool Car" plan.

A Georgia blanket maker did. Bibb used to ship to Texas by truck. But Southern, working with Missouri Pacific, devised a pool car operation.

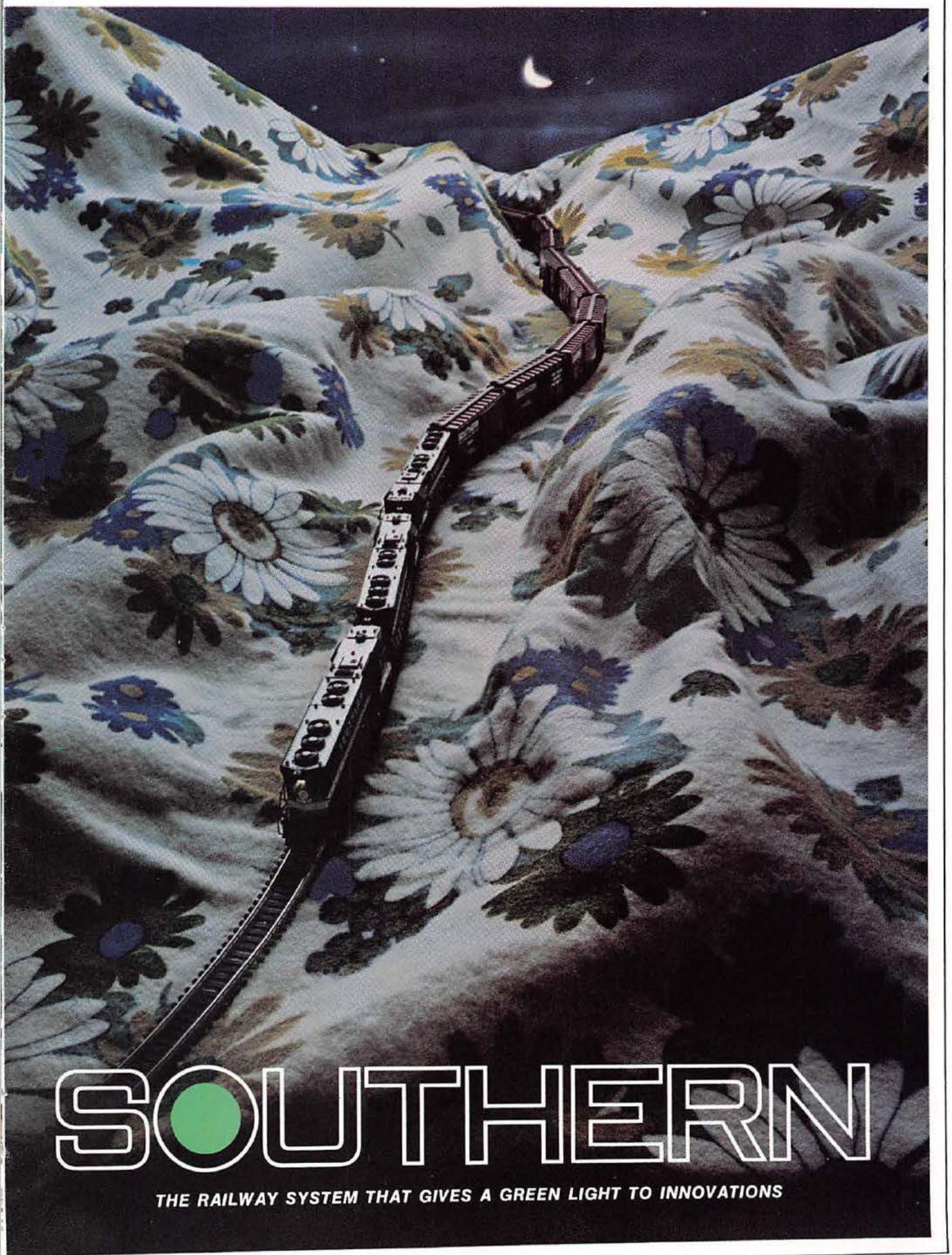
Individual orders were consolidated into one 17,000-lb., 9,121-blanket shipment to Dallas. There, they were broken down for distribution by truck throughout the Southwest.

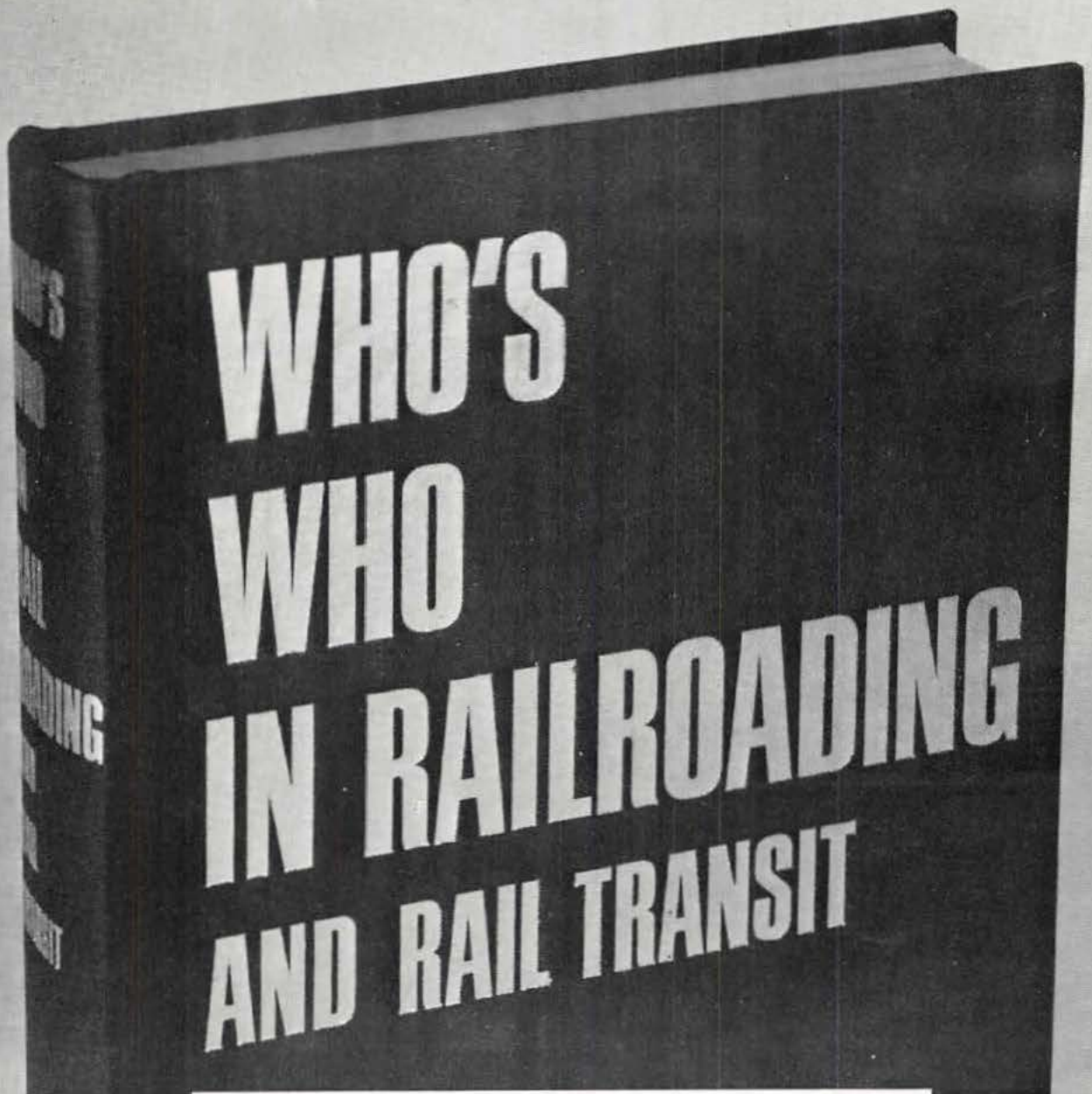
Not only were freight costs 37% lower, with big savings passed on to Bibb's customers, but deliveries were 7 to 9 days faster.

So, Southern can make this blanket statement: we'll use the best strengths of rail *and* intermodal *to help you squeeze waste out of distribution.*

Southern Railway System, Washington, D.C.

Support the Surface Transportation Act: the help transportation needs to help you.


SOUTHERN
THE RAILWAY SYSTEM THAT GIVES A GREEN LIGHT TO INNOVATIONS



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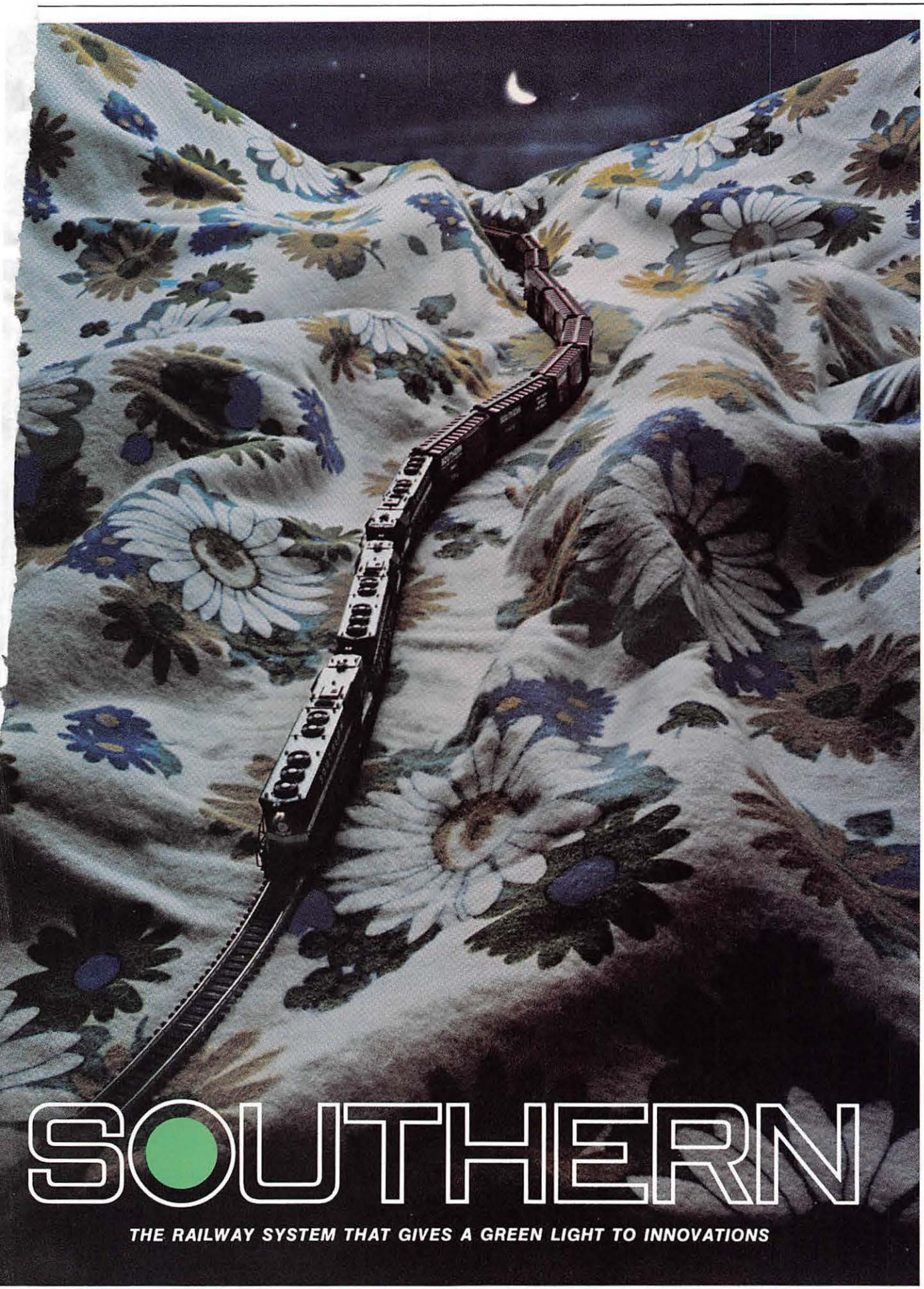
SOUTHERN
THE RAILWAY SYSTEM THAT GIVES A GREEN LIGHT TO INNOVATIONS

"I am more hopeful for the future of railroading because..."

"I am seeing signs of strength in lines whose position I felt was more precarious a year ago. And somehow, as unlikely as I thought it some while back, I cannot help but feel that Congress is going to be forced to take a hand in this thing and pass legislation that will make labor ease up on the railroads. That is the only solution I can see if the railroad industry is to survive under private ownership."—E.M. Burk, traffic manager, Wyatt Division, U.S. Industries, Inc., Houston.

"Mutual, open discussions of carrier/shipper problems has furnished better understanding on both sides, resulting in what seems to be more profitable rail business. Whether it is better management, or mergers to weed out the weak, the railroad industry as a whole seems more capable today."—Paul J. Wellnitz, regional distribution manager, Union Carbide Corp., San Francisco.

"Marketing practices, legislative climate, labor relations, public understanding, among other factors, appear to be improving."—W.D. Gordon, manager of transportation and purchasing, Shenango, Inc., Pittsburgh.

"Slowly but surely people are communicating. The man in the street is slowly being made aware that transportation is the life blood of our economy. Secondly, transportation management is slowly recognizing the fact that the users are badly needed to support the managerial efforts of transportation companies."—J. Robert Morton, vice president-corporate transportation, Combustion Engineering, Inc., Stamford, Conn.

"Some carriers are waking up, and also the AAR. Car service orders and car computers are often a solution to shortages. Improved service, new car designs, and many other innovations confirm our thinking that railroads have a good future. The winds of change are blowing."—John H. King, general traffic manager, Georgia Pacific Corp., Portland, Ore.

"Railroad management, for the most part, is more imaginative and responsive to the public needs. There is constant evidence of creative and aggressive marketing applications—new equipment and services that are competitively oriented. This has been backed up by a marked improvement in service. With any kind of constructive legislative program the railroads can become a more viable part of the economy."—R.C. Devenney, general traffic manager, New Holland Division of Sperry Rand, New Holland, Pa.

"It appears top railroad management is beginning to awaken to the fact that they need high volume traffic, such as is available from our industry, and appear to be interested in developing ways and means to once again become a serious competitive force."—Robert A. Propf, director transportation and distribution, Geo. A. Hormel & Co., Austin, Minn.

"For the first time the railroads have begun to analyze their problems and seek solutions. The rails now seem willing to abandon old techniques and explore new ones. For the moment there is hope."—Robert B. Reedy, manager transportation pricing, analysis and adjustment, Vulcan Materials Co., Birmingham, Ala.

"1. The Penn Central has made some progress toward solving their problems—first in terms of operations, and also they have a reorganization plan which will work, provided they receive wide industry and shipper support. (2) The rail car shortage which we feared in the West has not developed and we are hopeful that this results from better management."—Clyde L. Jacobs, manager of transportation, Crown Zellerbach, San Francisco.

"Railroads are better managed. And it appears that some legislative relief will be forthcoming, thus alleviating problems in labor, taxation, abandonment, pricing, car supply, finance."—W.E. Harvey, general traffic manager, Swift Fresh Meats Co., Chicago.

"Railroads have attempted to take advantage of and to utilize technology in every way. The management is not in a rut; it is looking ahead."—Lloyd C. Philips, traffic manager, Riviana Foods, Inc.

"Service has improved, car supply is much improved, management is more innovative and progressive."—E.S. Rosenzweig, traffic manager, Longview Fibre Co., Longview, Wash.

"There seems to be an emerging will to win attitude on many roads generated in part by aggressive marketing of TOFC services, improved and consistent on-time train operation. . .Innovations such as Commoditrain, shorter, more frequent trains add to enthusiasm; improving profit margins on some roads make it easier to go with a winner."—Carl N. Hayes, general traffic manager, Norton Company Coated Abrasive & Tape Divisions, Troy, N.Y.

"There is increasing public understanding of the railroad problems, along with the current trend of the various modes to cooperate with each other, at least on the legislative battlegrounds."—R.H. Heilman, corporate director transportation and distribution, A.O. Smith Corp., Milwaukee.

"I am less hopeful because..."

"The industry seems to be so engrossed in merger affairs, labor problems, profit squeeze, etc., that service is suffering as a result. Except for some 'no mix' rules for TOFC in the 28300 territory, very few new services are being offered to shippers and the best traffic continues to go to private trucking and common carriers other than rail."—Phillip T. Catalano, traffic and distribution manager, Steelcase, Inc., Grand Rapids, Mich.

"The attitude of most employees seems to be 'let the government take over operations.'"—Jesse F. Jamison, Jr., port director, Port of Corpus Christi, Corpus Christi, Tex.

"Very little is being done to improve service, implement cost saving plans or introduce equipment modernization." —J.L. Miller, manager of traffic, Birdsboro Corp., Birdsboro, Pa.

"I see the railroads making little or no effort to combat the growing threat of irregular route common carriage." —J.J. D'Arcy, general traffic manager, Congoleum Industries Inc., Kearny, N.J.

"I am fearful of nationalization of our railroads." —N.C. Kunzmann, traffic manager, Georgia Pacific Corp.

"The attitude of railroad personnel implies a drastic effort to obtain government subsidy. Once that is really effective, the shipper will become a number—not that he is not one now." —J.A. Illes, director of transportation, Outboard Marine Corp., Waukegan, Ill.

"Railroads still cannot freely price their service but still they must pay more for labor, equipment and services, sometimes by Federal edict. Place your finger in a vise and tighten the jaws; it will soon turn blue, then white; this is the railroad situation today. I feel blue as the finger in the vise. When the finger is white it will soon be dead; then we will have lost the most economical surface freighting mode." —J.M. Benson, distribution manager, Hiram Walker & Sons Ltd., Walkerville, Ont. ■

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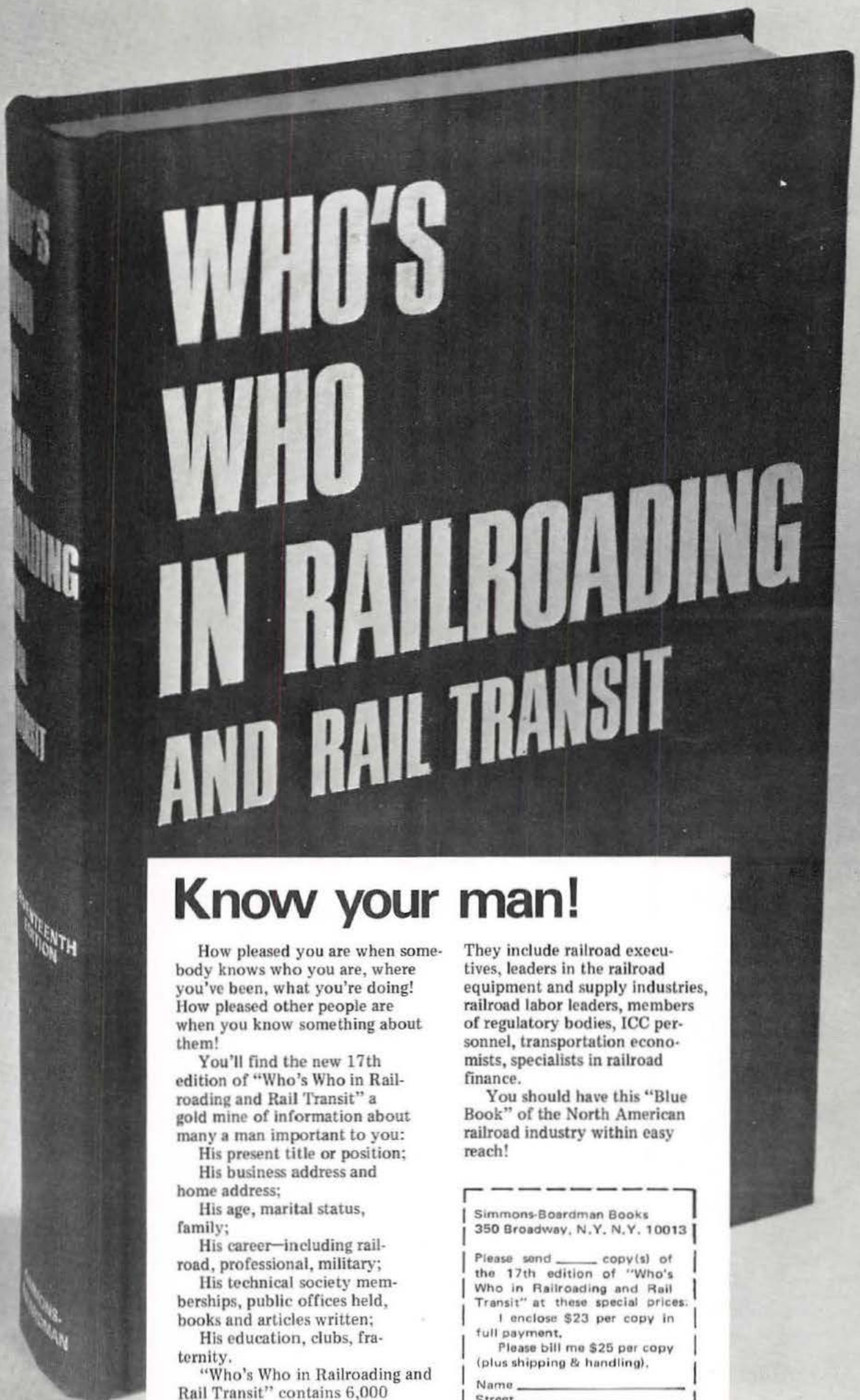

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New Products Report

New oiler and maintenance vehicle works safely, surely

A utility, all-purpose inspection, oiler and maintenance vehicle called the Expediter, has been designed by North American Railway Equipment Co. to meet the requirements of the railroad industry. Its extra-heavy-duty design and construction are said to assure minimum maintenance and long life. It is built low to the ground and its slow, smooth yard speeds insure ultimate safety and better inspection of a freight car undercarriage. The expediter is also a maintenance vehicle that permits making many car repairs without need to break trains. The narrow construction allows operation within 13-ft track centers. One-man operation for inspecting and oiling journals offers large time and labor savings. The expediter is available through outright purchase, lease purchase or lease and replacement plans.

Circle 60 on reader service card

Incinerating toilet provides pollution-free waste disposal

N-CON Systems' Thermox electric incinerating toilet provides sanitary facilities for up to eight persons where conventional sewerage practice is not practical and dumping of untreated wastes is not permitted. Before use, a waxed paper liner is dropped into the Thermox bowl. After use, stepping on the actuator pedal deposits the used liner into the electrically-powered incinerator where the wastes are consumed by direct contact with the heating grate. This facilitates use while the incinerator is in operation. All solid and liquid wastes are reduced to sterile, inert ash. The incinerator gases are processed by a catalytic after-burner before being discharged by the power exhaust system.

High-temperature incineration is provided by modular rod heaters which are part of the removeable ash pan. Blower motor and control relays are of plug-in design, permitting easy field replacement by even inexperienced persons. No flushing water, chemicals or holding tanks are required, making the system independent of temperature and soil conditions. To operate Thermox requires only a source of electric power and a vent stack. Thermox measures 15 by 17 by 23 inches and weighs 65 pounds. Power requirements are 2,850 watts, 208-240 VAC or 74-volt DC for railroad locomotive applications.

Circle 61 on reader service card

Multi-draft track scale weighs cars in motion

A Fairbanks Morse electronic multi-draft in-motion track scale is designed to weigh and total individual axle weights and provide total car weighs in any combination as a train passes across the weighbridge. The system automatically determines the number of axles per car and the direction of travel. The car's speed is monitored to assure accurate weighing. Locomotives are automatically recognized by wheel spacing and are not weighed. The Multi-Draft Weighing System is also capable of weighing individual cars as they move across uncoupled.

Circle 62 on reader service card

Pallet strap has new quick-release buckle

A new pallet strap/buckle assembly has been added to Kinedyne Corp.'s LoakLok line. The new assembly is designed to prevent cargo slipping and damage. The new self-tension, quick-release buckle—thoroughly field tested—has proved to be safe, easy to operate

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and positive locking. Used in conjunction with strong nylon webbing, it is plated for longer life and is further protected because its undersurface is completely cushioned by the webbing. This reduces replacement costs. In addition to its use as a pallet strap, the assembly can be used in various types of vans to prevent damage during shipment of any commodities requiring restraint in transit.

Circle 63 on reader service card

Tank liner developed for caustic service

An interior liner for tank cars, designated Columbia No. 8, is a water-reducible coating that offers a tough and flexible film with resistance to caustic at standard commercial concentrations of 50 to 73%. The PPG coating, which requires no primer, withstands temperatures necessary to handle high-solids caustic solutions without embrittlement or charring. Fewer coats are required than with other caustic-resistant coatings. The liner is available in a satin-sheen gloss white which may be tinted.

Circle 64 on reader service card

Transfer hose resists many industrial chemicals

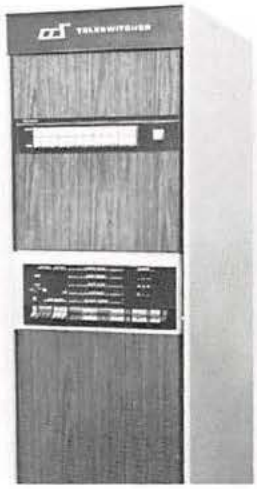
A chemically inert transfer hose is capable of resisting the effects of more than 600 chemicals. It is constructed with tubing of specially compounded cross-linked polyethylene which resists the corrosive action of 90% of all industrial chemicals. The B.F. Goodrich Multi-Chem 100 hose has an extremely smooth, non-abrasive interior surface designed to permit a smoother materials flow and facilitate cleaning. Suitable for either full vacuum or discharge service, it is constructed with four plies of high-strength nylon fabric and reinforced with corrosion-resistant, copper-coated steel wire helix. The cover is black neoprene. Multi-Chem 100, produced in six diameters from 1½ to 4 inches, is available in maximum 60-foot lengths. Its working pressure is 100 psi.

Circle 65 on reader service card

Electronic weigh system has integrated circuits

A series of automated electronic weighing systems, the Series 4000, utilize integrated circuit instrumentation for accuracy and flexibility. The Streeter Amet systems have strain-gage-type load cells in conjunction with total solid-state circuitry which provide instantaneous, precise display of weight information. The systems are adaptable to truck and railroad-car weighing and provide immediate digital display of weights, plus optional printouts. The series is available with 13 optional accessories in plug-in modules.

Circle 66 on reader service card



Message switching computer available

Computer Control Systems' Teleswitcher 310, an automated store-and-forward message switching system, can accommodate leased wire teletypewriter communications networks of up to 16 circuits and with as many as 384 stations.

The 310 will have essentially the same features as the larger Teleswitcher units, the 510 and the DCS 5000, including completely automatic operation, full programming and service support provided by CCS on a "turn-key" basis, and a large number of network monitor, interrupt and protect features. As with the earlier model Teleswitcher 300, the 310 will automatically develop traffic count reports for each circuit, generate priority polling patters for stations, insure that messages being prepared for transmission are in proper format and furnish automatic protection for stored data in the event of power failure.

The 310 can be adapted for different send-receive terminals, such as teletypes and IBM Selectrics; the only requirement is that all terminals in the network must have essentially the same operating characteristics. Heart of the Teleswitcher 310 system is a powerful minicomputer. The unit includes a disc file utilized in the store and forward function, and special communications interface equipment. A controller in the 310 will poll all terminal stations in the network it directs, store data in its disc file and direct it to the appropriate reception point in the network, all automatically and in fractions of seconds.

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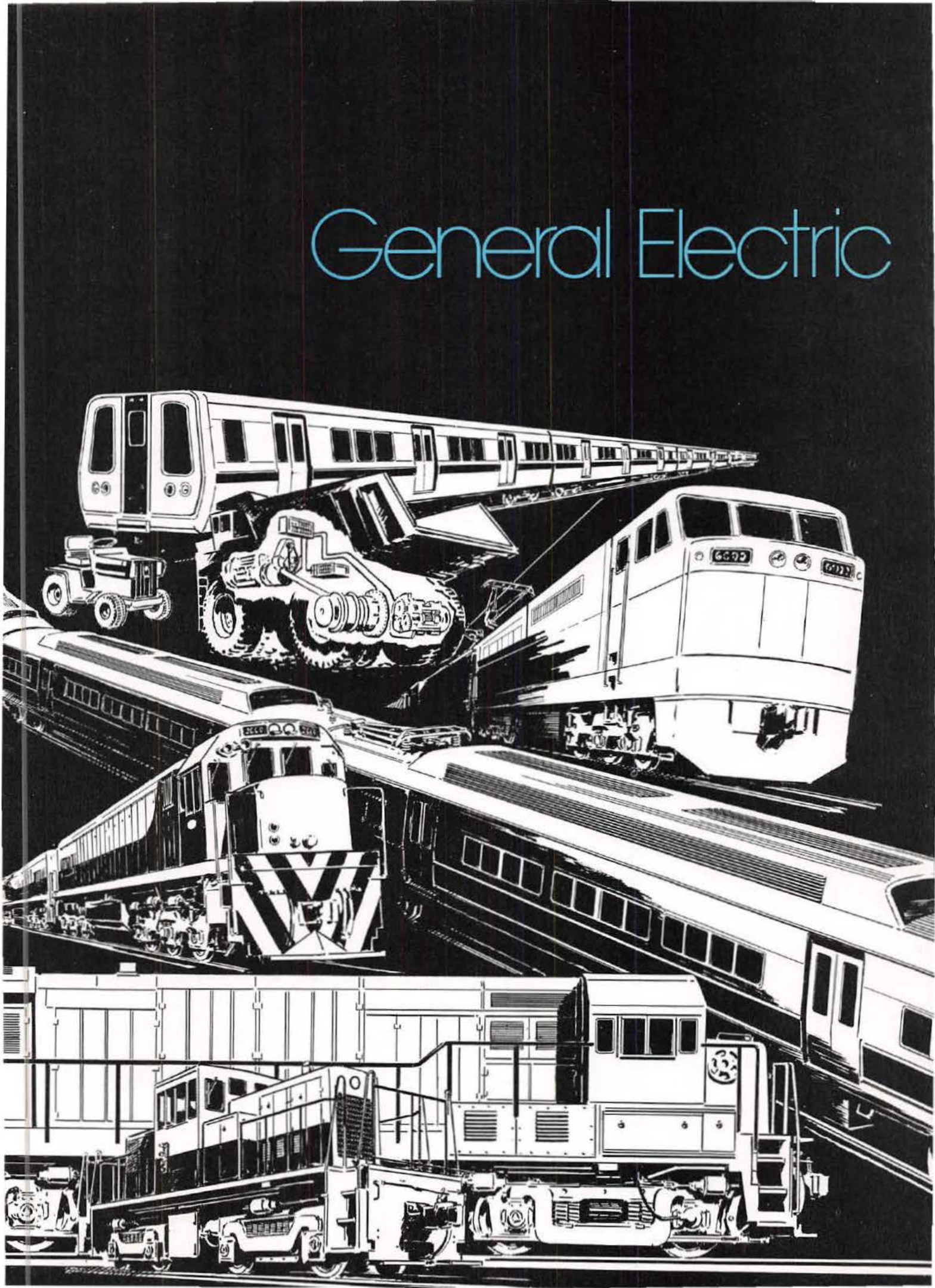

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Men helping Man

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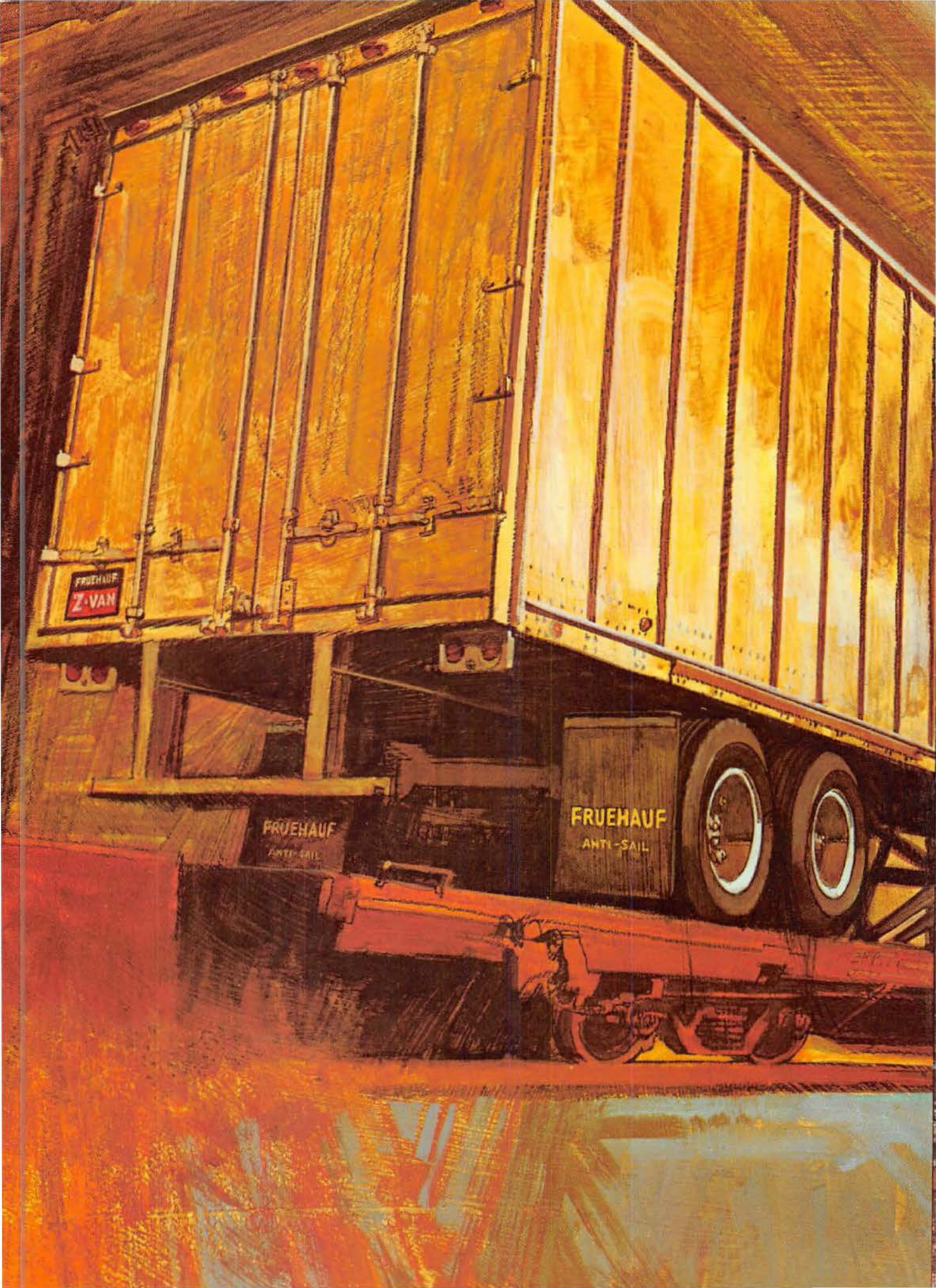
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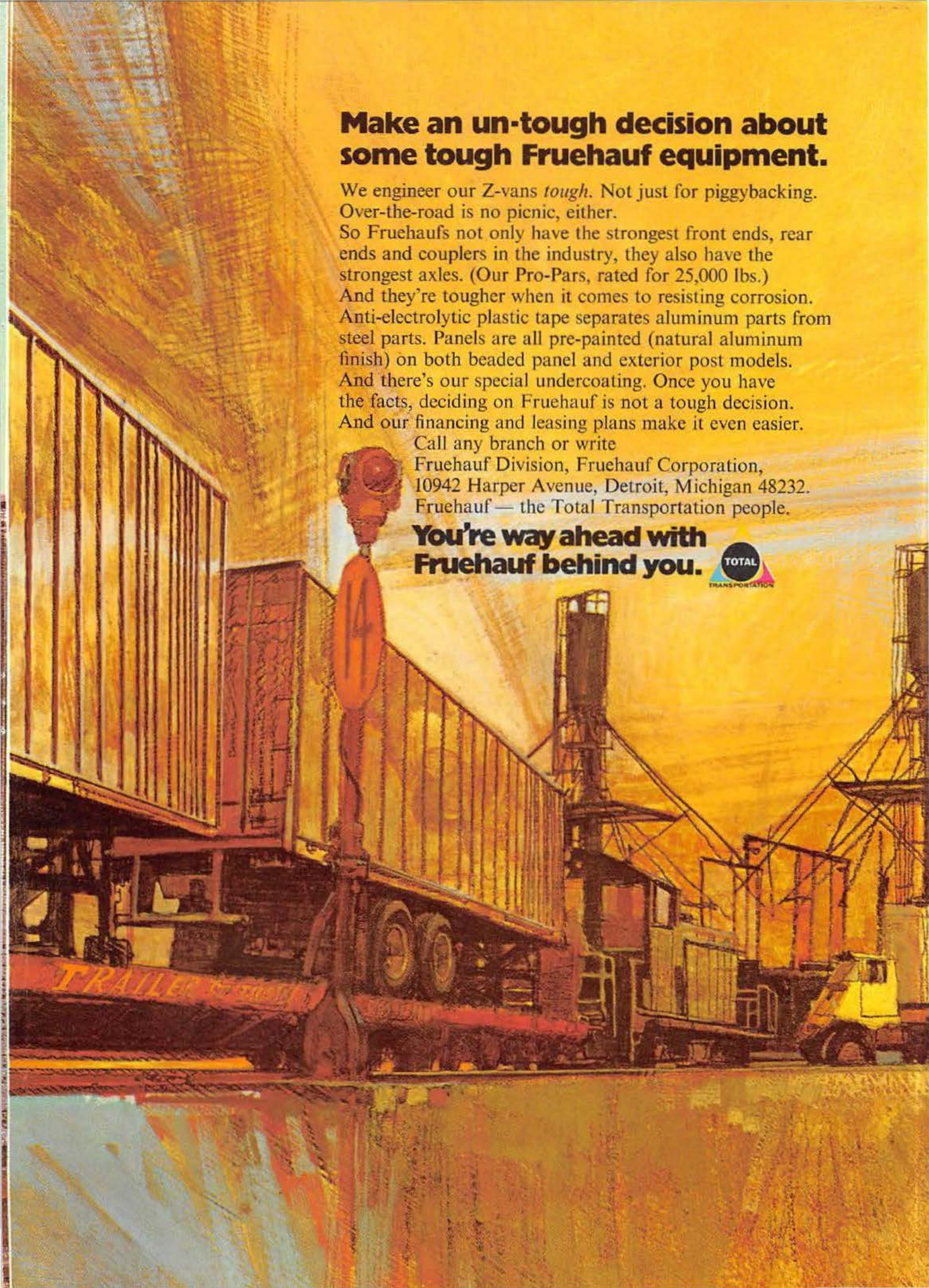
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We engineer our Z-vans *tough*. Not just for piggybacking. Over-the-road is no picnic, either.
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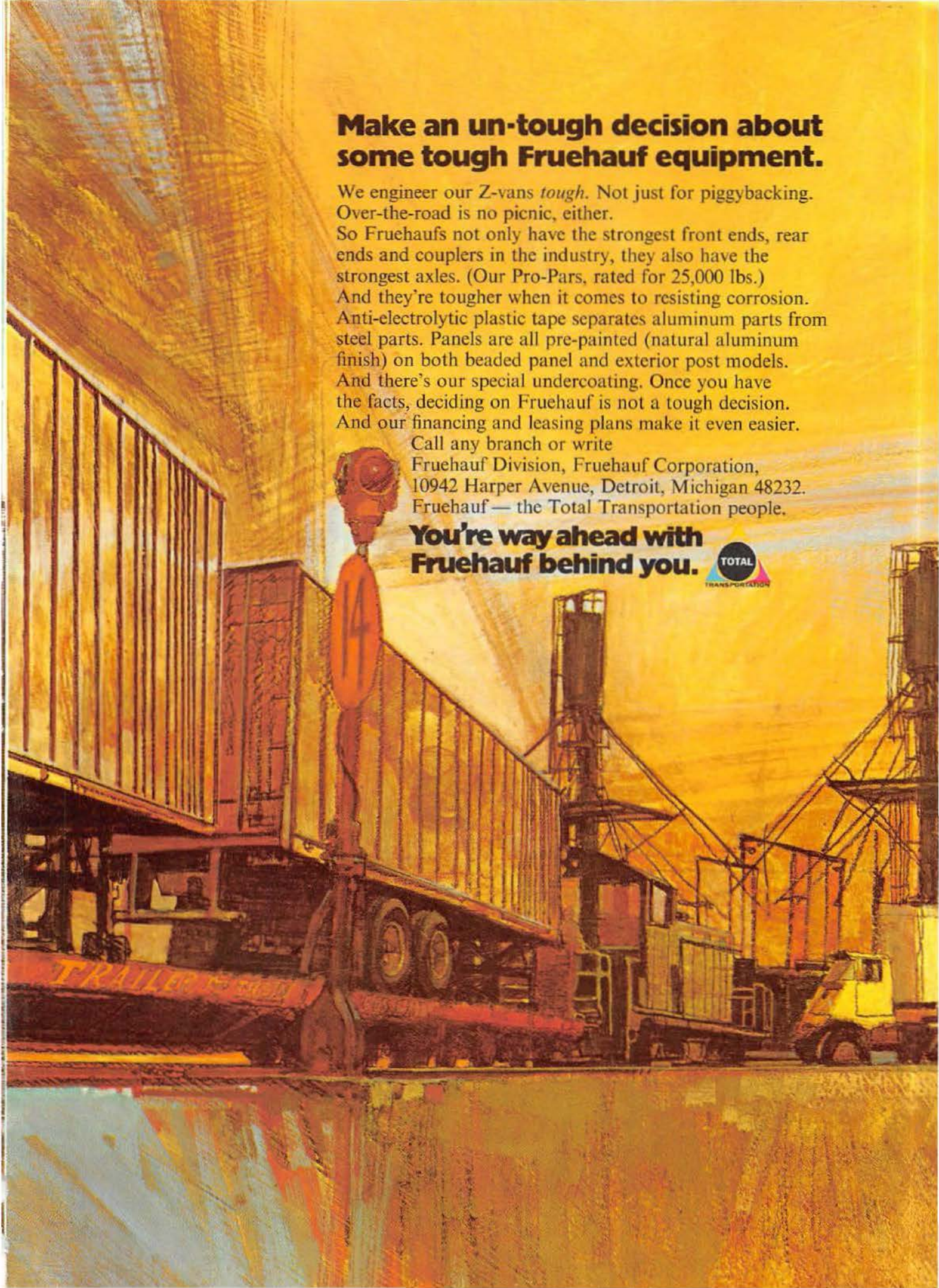
In our efforts to bring Penn Central through a successful reorganization, we are seeking new ways of making our railroad more efficient in meeting the needs of shippers.

That is why I read RAILWAY AGE and encourage my associates at Penn Central to do so. RAILWAY AGE is, in our estimation, a helpful source for checking our progress and performance against other railroads.

William H. Moore, President
PENN CENTRAL TRANSPORTATION CO.

PENN CENTRAL

RAILWAY AGE AS SEEN THROUGH THE EYES OF RAILROAD PRESIDENTS- NO. 6



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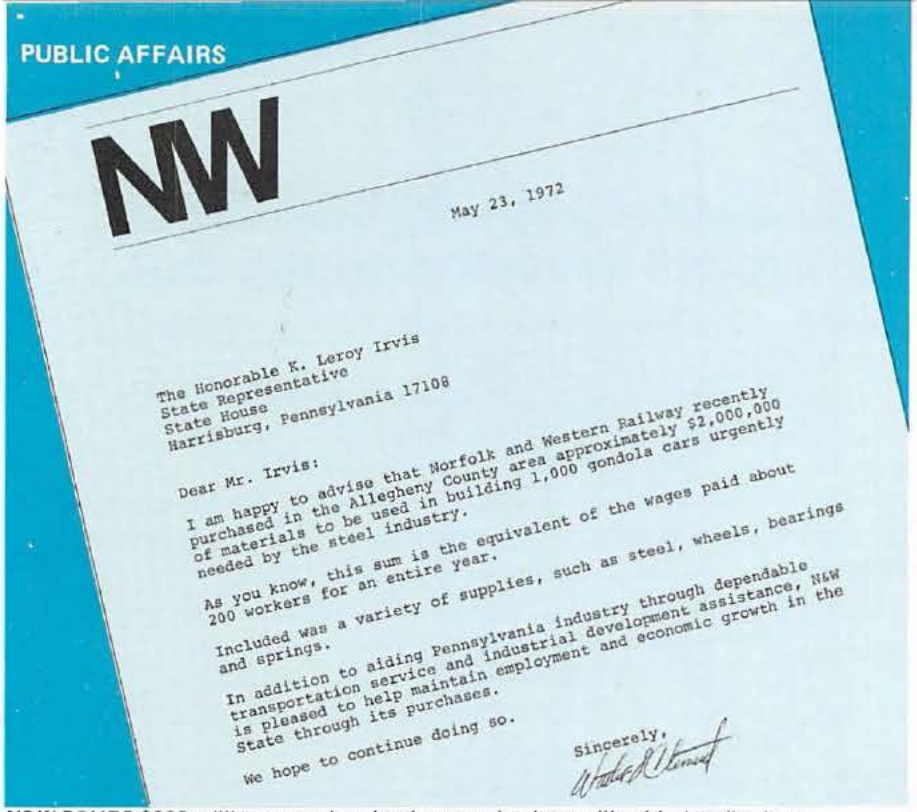

PUBLIC AFFAIRS

NW

May 23, 1972

The Honorable K. Leroy Irvis
State Representative
State House
Harrisburg, Pennsylvania 17108

Dear Mr. Irvis:

I am happy to advise that Norfolk and Western Railway recently purchased in the Allegheny County area approximately $2,000,000 of materials to be used in building 1,000 gondola cars urgently needed by the steel industry.

As you know, this sum is the equivalent of the wages paid about 200 workers for an entire year.

Included was a variety of supplies, such as steel, wheels, bearings and springs.

In addition to aiding Pennsylvania industry through dependable transportation service and industrial development assistance, N&W is pleased to help maintain employment and economic growth in the State through its purchases.

We hope to continue doing so.

Sincerely,

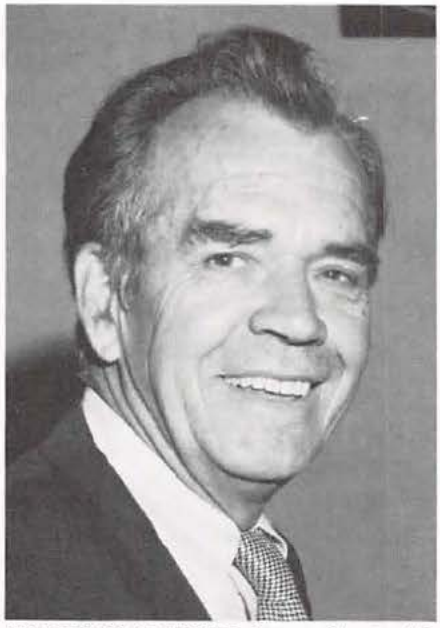
N&W POURS $600 million a year into local economies; letters like this describe how.

When money talks, opinion-leaders listen

A few weeks ago Indiana State Legislator Philip E. Gutman received a letter from Roanoke, Va., that began, "I am sure that you will be interested to learn that Norfolk & Western Railway recently mailed a check for $163,611.53 to the Treasurer of Allen County at Fort Wayne in payment for the railroad's first half property taxes in the county." The letter-writer went on to say that N&W's taxes for the full year in Allen County would exceed $327,000, an amount sufficient to pay for a year's education for 379 children in Allen County's public schools.

A few days later the following letter went from Roanoke to House Majority Leader K. Leroy Irvis at Harrisburg, Pa.: "I am happy to advise that Norfolk & Western Railway recently purchased in the Allegheny County area approximately $2,000,000 of materials to be used in building 1,000 gondola cars urgently needed by the steel industry. . .In addition to aiding Pennsylvania industry through dependable transportation service and industrial development assistance, N&W is pleased to help maintain employment and economic growth in the State through its purchases."

Both letters were signed by Walter S. Clement, N&W's vice president-public affairs at Roanoke. They are representative of hundreds of similar letters that during the next year will go out to opinion-leaders throughout the territory the railroad serves. While the letters differ in content, the basic message is the same: that N&W is a good corporate citizen contributing mightily to local economies.


WALTER S. CLEMENT, vice president-public affairs, is the man behind the missives.

Clement explains: "Of the $700 million Norfolk & Western receives in revenues a year, more than $600 million is pumped back into local economies through payrolls, taxes, purchases and dividends. To make public officials aware of the tremendous contributions N&W makes in their areas, we develop and send detailed facts and figures to local government officials. The information also is given to N&W supervisors."

The cumulative effect of this program is to drive home the enormous economic advantages that accrue to any given area served by the railroad. For example, Indiana opinion-leaders, from the governor on down the line, are learning that N&W pours more than $35 million a year into that state alone. This takes the form of $30.5 million in payrolls, $2.8 million in state and local taxes, $1.5 million in purchases from 165 different plants, and more than $300,000 in dividends to shareholders.

Indianans are also reminded that N&W provides 1,500 specially-equipped freight cars to Indiana plants, for which the railroad has spent over $28 million ("the companies benefit from transportation savings and the jobs of their 250,000 employees are more secure because of N&W's investment"; that N&W owns and pays taxes on more than 1,500 acres of Indiana land that is protected as sites for future industrial development; that during the last three years N&W helped locate 42 new or expanded plants in Indiana, with total investment of $58.5 million and planned employment of 2,500.

No opportunities are overlooked to acquaint local leaders with what N&W is doing.

When welded rail is to be laid, says Clement, N&W gets in touch with local officials, invites them to witness the operation—and explains that it is all part of a continuing program to make N&W the safest railroad in the world.

When a new flasher signal is installed, local officials are notified and reminded that although the Federal, state and local governments share the installation costs with N&W, the carrier must pay all future operating and maintenance costs, ranging from $600 to $1,200 a year.

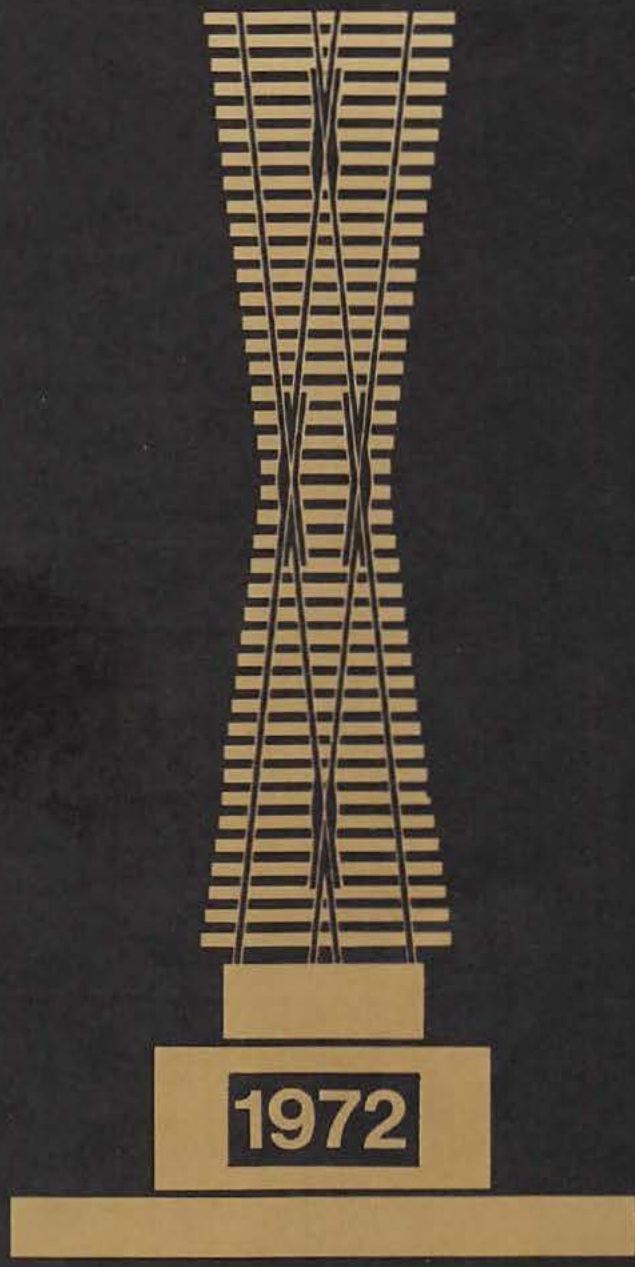
Is N&W's "money talks" program working? The mail flowing back to Roanoke indicates that it is.

Pennsylvania House Majority Leader Irvis wrote back to say: "Expenditures of this type enable industries to maintain employment and increase economic development."

N&W is especially pleased to get comments such as this one from a member of the Virginia House of Delegates: "I was pleased to learn of your new computer system. . .and want you to know that I am willing to help get the State Air Pollution Control Board to allow burning of your rights-of-way so that they can be kept clear on an economic basis."

That's the bread-cast-upon-the-waters theory at work. ■

LET'S IMAGINE THERE WAS THE GOLD TRACKWORK AWARD.



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But then, we have a head start on everyone else. We've been making frogs, switches and crossings since 1879. We were the best then. We're the best now. And we'll be on top tomorrow, too.

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"A helpful source for checking our progress and performance"

In our efforts to bring Penn Central through a successful reorganization, we are seeking new ways of making our railroad more efficient in meeting the needs of shippers.

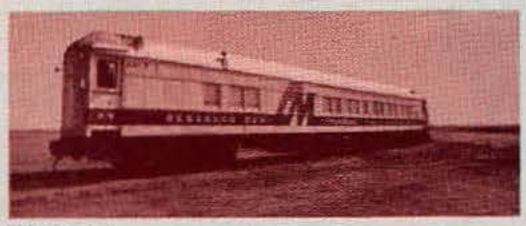
That is why I read RAILWAY AGE and encourage my associates at Penn Central to do so. RAILWAY AGE is, in our estimation, a helpful source for checking our progress and performance against other railroads.

William H. Moore, President
PENN CENTRAL TRANSPORTATION CO.

PENN CENTRAL

RAILWAY AGE AS SEEN THROUGH THE EYES OF RAILROAD PRESIDENTS- NO. 6

First class cushioning takes first class research.



We know.

We've been firmly committed to continuing a first class, broad scope research program ever since we developed the FreightMaster® end-of-car cushioning concept nearly 15 years ago.

Pure or practical, our research is thrust towards solving your current problems and helping you keep a step ahead of the problems you'll face tomorrow.

As an example, no one else has the background and the experience in train dynamics that we've acquired over the years. The reason is simple—no one else has put the time and money into a complex research program of this magnitude.

This dedication to all-round research has paid off by providing both railroads and the shippers with end-of-car cushioning equipment that's unequaled in performance capacity and durability. The record proves it.

Research is a basic reason for our occupying the first place position in end-of-car cushioning sales. Almost 60,000 FreightMaster units are working every day helping protect every type of car and cargo that rolls on the rails.

First class cushioning for first class customers. That's what it's all about.

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We're doing it with cars for aggregate service.

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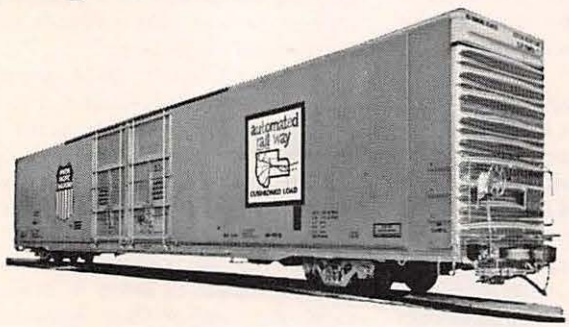

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Check the areas in which Greenville design can give you a competitive edge.

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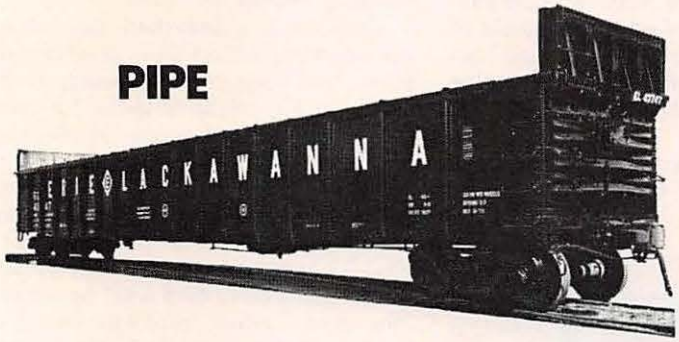

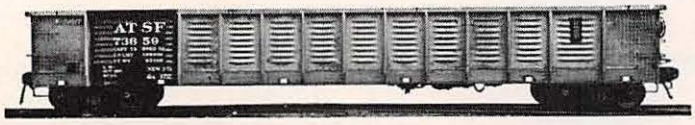

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Circle 22 on coupon page 48A

Supers' problem-solving roles emphasized at meeting of AARS

There it was: the voice of Robert Goulet, with "The Impossible Dream" from "Man of La Mancha," while the screen showed Don Quixote tilting at windmills, the blades of which were labeled Rough Handling, Delay, Defective Equipment, Temperature Failure. And, interspersed, the sounds of over-speed impact, and the pictures of damaged freight strewn about in freight cars.

And then there was D.G. Ruegg, assistant to the vice president-operations of Santa Fe, asking members of the American Association of Railroad Superintendents to make freight loss and damage prevention a "possible dream," through new approaches that recognize L&D not as a national problem but rather as a local problem repeated all over the country.

Ruegg landed hard on the responsibility of the operating department—pointing out that of last year's total $235-million L&D payout, almost $160 million could be directly traceable to bad operating practices. And, he called for a new outlook—one that emphasizes damage prevention instead of claim prevention: "The former is a definite, affirmative program to improve the quality of our service to our customers, while the latter is often an after the fact effort to put a patch on a problem rather than to eliminate it." The difference may be subtle, he noted, "but if we orient ourselves to solving our customers' problems, it follows rather logically that our own claim problems will be reduced at the same time. And, we'll produce more satisfied customers who will continue to favor us with their business."

Ruegg gave full credit to the AAR's L&D-prevention effort. But, he told AARS, "I firmly believe that your major effort should be concentrated at home. This is where you have control. This is where real accomplishment can and must be made."

While Ruegg was applying a words-and-pictures jolt to the L&D problem, AARS members were also tearing into a number of other operating problems—improvement in terminal operations, the handling of hazardous materials, the development of operating managers, the merging of computer capability with operating-department requirements. And, they were getting new insights on the industry and their role in it from a pair of top officers—Louis W. Menk, chairman and chief executive officer of Burlington Northern; and Paul F. Cruikshank, president of Fort Worth & Denver.

Menk came on particularly strong in comments on teamwork—specifically, the teamwork between rail management and rail labor: "It is my belief that one of the potential areas of greatest change in our industry—both immediate and prospective—is labor relations. I am convinced that we stand on the threshold of a new era in this critical field. And I am also convinced that you, as operating officers, can influence the direction this trend takes."

Notwithstanding some of the "discouragements and disappointments of our dealings with the labor organizations in the past few years," Menk said, "I have great hope for the future. Of great significance are the progressive and imaginative developments which are now evolving in this field. There is a growing awareness of a community of interest between the railroads and their represented employees."

As for BN itself, Menk pointed out that "we have established a policy to maintain relations with labor organizations in a manner which is constructive, effective, enlightened, and which is conducted on the highest ethical level. There is no place within our organization for an officer who is high-handed, unfair or sharp in dealing with employees and/or their organizations. I believe this is and must continue to be the industry outlook."

And, the role of the operating officer? "You deal with many employees every day. You know their problems. You know their hopes and aspirations. You know what it takes to turn them on—and you know what turns them off. You must be experts in human relations, in employee relations. And let me just add that I've never known of a case where harmonious employee relations did not work to both employee and company benefit."

Cruikshank approached the job of the operating officer from several viewpoints—including his relationship to his industry, his relationship to his company, and his introspective relationship to himself. He urged AARS members to "broaden out, and have as full an understanding of the major issues facing our industry as your president has." FW&D's president also looked internally in the industry to find what he termed "the most serious problem facing us today, which is that the vertical, intra-departmental relationships are much stronger than the horizontal relationships which cross departmental relationships. . .It is time we examined why we are in business. [It is time we realized that] we exist only because we can profitably fit into the total distribution needs of our customers. That must be the basis of our philosophy of management. And if you have not already guessed it, that also happens to be the definition of marketing."

President of AARS for 1972-73 is D.R. Turner, vice president and assistant general manager, Belt Railway of Chicago, succeeding Clark Hungerford, Jr., assistant to the president, Western Railroad Association. ■

"Operating men can influence the trend in labor relations"

Louis W. Menk
Chairman
Burlington Northern

"Where do we fit into the total needs of our customers?"

Paul F. Cruikshank
President
Fort Worth & Denver

"Freight loss and damage prevention is a possible dream."

D.G. Ruegg
Assistant to VP-Operations
Santa Fe

LETTERS

The story behind Penn Central's big piggyback push

Philadelphia

To the Editor:

In your comprehensive report entitled "TOFC/COFC Hits Its Stride Again" (Railway Age, May 29, p. 27), reference is made to the concern expressed by competitors of Penn Central as to "what may be happening to rate structures and profit levels" as that carrier moves to develop its piggyback business, and the "questionable logic" supporting its program.

In the attempt to reorganize Penn Central the controlling factor is going to be its ability to reverse the downward business trend of recent years and to establish a growing volume of profitable freight traffic. Efforts now being expended to increase manpower utilization and to eliminate the burden of deficit branch line and passenger services—even if successful—will not alone produce earning power. For Penn Central to emerge from bankruptcy in the conventional pattern and to stay afloat in the years ahead, business must increase and keep increasing.

What are the prospects for this vital ingredient of Penn Central's reorganization?

If we turn to traditional railroad traffic in the eastern part of the United States, the outlook is not encouraging. The area with its developed industrial economy is not growing, and in New England and the Middle Atlantic States—which is Penn Central territory—there has actually been retrogression in production. Bituminous coal traffic—which has been a mainstay—is off, partly because of pollution control.

To increase its business, Penn Central must turn to where the business is: on the interstate highway system. Here are millions of tons moving to and from the great industrial complexes of the East. In trying to penetrate this market, conventional rail service does not have a prayer. Penn Central's only chance is to offer a cheaper highway for distances beyond 250 to 300 miles—a cheaper highway for regulated motor carriers, unregulated motor carriers, private fleet operators, forwarders, and anyone who uses the highway for moving freight. The railroad role would be as underlying carrier for at least part of the through transportation.

Obviously, if Penn Central is to penetrate this immense transportation market, it will have to recognize something less than the cost of operating over the highway as an absolute ceiling for its charges. Moreover, it must be prepared to offer a completely reliable, scheduled service.

We believe that it is possible, working within these limits, to increase Penn Central's traffic and to improve net earnings. The contemplated service will employ shorter trains operating on tight schedules with minimum terminal expense and maximum utilization of equipment in turnaround service. Preferably the service would be rendered under contract rates (agreed charges), but today this is possible only in working with motor carriers, steamship lines, (and forwarders if the Congress acts favorably on pending legislation). Contract rates should also be available in dealing with shippers directly, as they are in Canada, but in this country the transportation industry is more concerned with suppressing competition than in encouraging new marketing practices on the part of individual competitors. In the meantime Penn Central will hope to attract shippers with volume rates.

Make no mistake about it. What is at issue in the reorganization of Penn Central is the viability of the rail form of transportation in the eastern region of the United States. The only two carriers in that area with earnings haul heavy volumes of bituminous coal under the most favorable operating conditions. The others are in bankruptcy, or on the verge. In the case of Penn Central at least, nothing will rescue the situation short of a major and sustained increase in business. In the East with its mature economy, where can this come from? In our view the best prospect is to induce the longer-haul trailer on the highway to move over to the railroad. It will take much persuasion, but the basic economics, if effectively asserted, are on our side.

Jervis Langdon, Jr.
Trustee
Penn Central Transportation Co.

Nationalization

Manchester, Tenn.

To the Editor:

I read with interest the Myth and Truth article in Railway Age March 27. Unfortunately, as an engineer who knows the European railway systems quite well, I had to disagree with quite a number of statements which were obviously biased. I don't think that this article is in any way a proof of the inferiority of the nationalized railroads. Just to make a few points: If the American private railroad system had been in effect in Europe, there would not be any railroad passenger service to speak of any longer because it is not profitable. However, that means that there would not be any passenger service to speak of at all any more because nobody could move on the highways any more for all the buses and cars that would have to take the railroads' place. Therefore the passenger service had to be maintained. Now, how can you run 150-car freight trains between passenger trains that go up to 125 mph on main lines at rates of up to 5 or more per hour. (800 passenger trains out of Cologne a day!) You have to use short, fast freight units, therefore.

As to the small freight cars, they can be loaded faster and small industries can fill a car quickly for a minimum of delay (and they don't derail in spite of 50% having inadequate bearings according to your article). Compare the percentage of European industries with railroad connection to the American.

The difference between American and European railroads lies much more in the kind of subsidy the taxpayer pays: Just add up the subsidies paid for highways and air transportation in our country over the last 20 years and compare it with the subsidies for railroads, highways and air transportation in Europe and you will find that the statistics on pages 30 and 31 look a lot different. . . .We don't want to subsidize public transportation? Oh yes, we do it day after day in paying for highways which we may never use and which are ruined by trucks which don't pay for even 10% of the damage they do.

Heinrich J. Ramm

(1. Railway Age acknowledged the superiority of Europe's showcase passenger trains, but pointed out that this showcase has not come cheaply; at the same time we described the second-class status of freight carriage, both qualitatively and quantitatively, on most of Europe's trackage. 2. Railway Age did not question—did not, in fact, mention—the use of short, fast freights, of which we heartily approve, at home and abroad. 3. While some European shippers may find small two-axle cars adequate, many do not and told Railway Age so. 4. Railway Age agrees with Mr. Ramm that Europe has subsidized its railways heavily while the U.S. has poured most of its own largesse into competitive modes. The question is not whether the U.S. should try to redress this imbalance—but whether nationalization is the way to do it.—**Editor.**)

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People in the News

ALASKA.—**Irvin P. Cook,** chief engineer, Anchorage, retired.

BESSEMER & LAKE ERIE/UNION.—**John D. Morrison** appointed general counsel, Pittsburgh. He was formerly general solicitor, **Illinois Central,** Chicago.

BURLINGTON NORTHERN.—**Gary H. Peterson** named attorney, Portland Region, to succeed **Louis M. Parker,** resigned.

CANADIAN NATIONAL.—**L.M. Poitevin,** general manager, St. Lawrence Region, appointed assistant regional vice president, Montreal, and his former position abolished.

CANADIAN PACIFIC.—**John J. Raby,** superintendent motive power and rolling stock, Prairie Region, Winnipeg, Man., appointed chief motive power and rolling stock for the system, at Montreal, succeeding **Harold W. Hayward,** who retired June 1, after more than 49 years with the CP.

CHICAGO & EASTERN ILLINOIS.—**Louis J. Layton** appointed freight traffic manager, St. Louis. **Leslie H. Johnson** named assistant general manager-rates and divisions, and **Bert A. Van Kampen,** manager-rates, both at St. Louis.

FLORIDA EAST COAST.—**C.K. Turman** appointed director, intermodal services, a new department established within the Traffic Department, St. Augustine, Fla. Mr. Turman also will continue to serve as assistant vice president Florida East Coast Highway Dispatch Co. **G.A. Tonsager** appointed director, sales service. **J.C. Jones** named assistant manager, intermodal services. **Thomas J. Lynch** appointed district sales manager, Chicago.

ILLINOIS CENTRAL.—**Douglas D. Hagestad** appointed director, bulk materials marketing; **Gerald F. Mohan,** director, manufactured products marketing; **David L. Henderson,** director, farm and food products marketing. Mr. Hagestad was formerly an assistant to the president and Messrs. Mohan and Henderson were marketing managers.

Frank Malone named press representative, Corporate Relations Department. Mr. Malone was formerly western editor, **Railway Age,** Chicago; Washington editor; and traffic editor, Chicago. He joins **IC** after serving as a staff writer for the Sunday magazine of the **Arizona Republic,** Phoenix.

Robert D. Kelly, commerce attorney, promoted to general attorney.

MISSOURI-ILLINOIS.—**K.J. Groh** named traffic manager, St. Louis.

MISSOURI PACIFIC-TEXAS & PACIFIC.—**William G. Taylor,** freight traffic manager-pricing and divisions, advanced to assistant vice president-pricing and divisions, St. Louis, to succeed the late **Steve P. Lawrence. Raymond J. Marshall,** regional sales manager, Southeastern Regiona, Atlanta, transferred to the Southwestern Region, Dallas, to succeed **Gail D. Tatum,** who retired May 31 after 48 years of service. Mr. Marshall's successor is **Donald S. Blanchard,** regional sales manager, Pittsburgh, who in turn is succeeded by **John P. Gilbert. Walter P. Coleman** named assistant director, automotive traffic, Detroit. Mr. Coleman was formerly freight sales manager, **Chicago & Eastern Illinois,** Detroit.

NORFOLK & WESTERN.—**H.N. Hering** named assistant superintendent, Chicago Terminal Division.

Albert J. Graham, Jr., appointed director personnel. **David G. Helmer** and **Paul N. Austin** named supervisors personnel. **Dale H. Mullen** appointed personnel assistant and **B.L. Markham** named administrative assistant.

PENN CENTRAL.—**Paul R. Duke,** senior reorganization attorney, appointed general counsel- reorganization, Philadelphia.

George S. Triebel, assistant production engineer, appointed division engineer, New Haven, Conn.

PITTSBURG & SHAWMUT.—**Walter E. Buhite,** president, Kittanning, Pa., will retire July 1, after 37 years of service. **Walter R. Weaver,** vice president-maintenance, Brookville, Pa., appointed executive vice president and chief operating officer, effective June. 1. **Alan G. Dustin** will act as chief executive officer of the road.

SANTA FE.—**J. Robert Jones,** assistant vice president-personnel, named vice president-personnel, Chicago, effective July 1, to succeed **O.H. Osborn,** who retires after more than 46 years' service.

Charles H. White, manager, equipment services, Chicago, appointed manager-sales, San Francisco. **L.C. Johnson, Jr.,** district sales manager, Portland, Ore., succeeds Mr. White.

SOUTHERN PASSENGER ASSOCIATION.—**Ernest C. Littleton, Sr.,** chairman, Atlanta, Ga., will retire May 31, after 44 years in the railroad industry.

TERMINAL RAILROAD ASSN. OF ST. LOUIS.—**C.G. Cross** appointed vice president-traffic and industrial development. **Charles F. Sargent** named real estate and tax officer.

VERMONT.—**Loren B. Hamby,** manager-traffic control, promoted to vice president-intermodal services, St. Louis, Mo.

WESTERN MARYLAND.—**Joseph J. Jaspers,** district sales manager, St. Louis, Mo., retires June 30 after more than 42 years of service.

SUPPLY TRADE

Ronald W. Sweeney has joined the Chicago sales force of **Simmons-Boardman Publishing Corp.** He has been assigned to work on the company's Railway Division publications and the annual Plant Location. Sweeney, a native of Davenport, Iowa, joined Simmons-Boardman earlier this year as a member of the circulation department. He previously worked for Leeds-Raines & Associates, management consultants, and Fernandez & Kern Associates, architectural designers.

Railway Progress Institute will move, on July 1, to 801 North Fairfax Street, Alexandria, Va. 22314. Phone: (703) 836-2232.

J. Robert Jones
Santa Fe

Ronald W. Sweeney
Simmons-Boardman

Thomas G. Swartzlander has been appointed market manager-bulk commodities and railroads, **North American Car Corp.**

Ellcon-National, Totowa, N.J., has announced the following appointments: **M.A. Ruckel,** assistant to vice president-engineering; **K.W. Schult,** manager of engineering; **A.C. Maggio,** manager-quality control; and **R.G. Beacon,** manager-research and development.

Annellux Systems Corp., El Segundo, Calif., and its **Mobil-Communication Division,** Costa Mesa, plan relocation early in September to the Irvine Industrial Complex, 2122 Campus Drive, Irvine, Calif. 92664.

Mel Stevenson has been assigned full responsibility for all railroad accounts, **Parr, Inc.,** 18400 Syracuse Avenue, Cleveland, Ohio.

Dart Containerline vessels on June 25 shifted their terminal operations to the new Global Marine Terminal at Port Jersey, Jersey City, N.J. For LTL consolidation, Dart will continue to receive general cargo at Pier 36 East River, Manhattan, and Shed 224 at I.T.O. Terminal, Port Newark, where it will be containerized and trucked to connecting Dart vessels at Global Marine Terminal.

Robert A. Bulkley has been named Southwestern district manager, Transportation Division, **Kemlite Corp.,** Joliet, Ill. He was formerly manager, Southeastern district.

INDUSTRIAL TRAFFIC

Leo N. Brown has been named division traffic manager, Checkerboard Foods Division, Consumer Products Group, **Ralston Purina Co.,** in addition to his responsibilities as manager, transportation services.

Frank C. Beuthin, assistant traffic manager, **Cory Corp.,** Chicago, has been named traffic manager, replacing **Herbert Kaspar,** who retired May 31. **Raymond Jacobi** has been promoted to assistant traffic manager.

John W. Westhause, manager, Traffic Department, **Granite City Steel Co.,** St. Louis, has been promoted to assistant director of traffic.

William R. Boyd, manager of car control,

corporate traffic department, **General Foods Corp.**, White Plains, N.Y., has been promoted to manager of rail fleet administration. **Raymond Cartwright**, manager of private truck operations, has been promoted to manager of private carriage and transportation planning for the department.

Floyd T. Springle has joined the New York traffic and distribution consulting firm of **Denenholz & Janer, Inc.**, as an associate, specializing in rate matters.

Robert E. Heine has been appointed manager of physical distribution, **International Telephone & Telegraph Corp.**, New York. Previously, Mr. Heine was director of physical distribution, ITT Illumination & Electrical Products Group.

George R. Nemetz has been named manager of traffic operations east of the Rockies, **Shell Oil Co.** and **Shell Chemical Co.**, with headquarters at Houston, Tex. Mr. Nemetz replaces **E.D. Olmo**, appointed manager of volatile supplies operations, transportation and supplies operations, east of the Rockies.

OBITUARY

William J. Ennis, 58, manager of railroad sales, **MacLean-Fogg Lock Nut Co.**, died April 28 in Wilmette, Ill.

W. Wendell Reuss, 69, retired railroad analyst, **W.E. Hutton & Co.**, died at his home in Atlantis, Fla. on June 13.

DIVIDENDS DECLARED

BURLINGTON NORTHERN.—37½ cents, quarterly, paid May 11 to holders of record April 14; 5½% Preferred, 13 3/4 cents, quarterly, payable June 30 to holders of record June 9; 37½ cents, quarterly payable Aug. 10 to holders of record July 24; 5½% Preferred, 13 3/4 cents, quarterly, payable Sept. 30 to holders of record Sept. 8.

CANADIAN PACIFIC.—32 cents, semi-annual, payable July 28 to holders of record June 27.

CAROLINA, CLINCHFIELD & OHIO.—$1.25, quarterly, paid April 17 to holders of record April 3.

CHESAPEAKE & OHIO.—Common, 75 cents, paid June 20 to holders of record June 1.

HUDSON & MANHATTAN.—Class A, liquidation, $2.20, paid May 15 to holders of record May 8.

KANSAS CITY SOUTHERN.—4% Preferred, 25 cents, quarterly, payable July 17 to holders of record June 30.

MISSOURI PACIFIC.—Class A, $1.25, quarterly, paid March 31 to holders of record March 22; Class A, $1.25 quarterly, payable June 30 to holders of record June 19.

NORFOLK & WESTERN.—$1.25, quarterly, paid June 10 to holders of record May 11.

PITTSBURGH & LAKE ERIE.—$1, quarterly, paid April 14 to holders of record March 28; $1.50, payable July 14 to holders of record June 30.

PITTSBURGH & WEST VIRGINIA.—13½ cents, paid March 13 to holders of record March 6.

RICHMOND, FREDERICKSBURG & POTOMAC.—Common and Divident Obligations, $2.25, quarterly; 6% Gtd., 75 cents; 7% Gtd., 50 cents, all paid May 1 to holders of record April 15. Common and Dividend Obligations, $2.25, quarterly; 6% and 7% Gtd., $2.25; all payable Aug. 1 to holders of record July 15.

ST. LOUIS-SAN FRANCISCO.—62½ cents, increased, quarterly, paid June 15 to holders of record June 1.

SOUTHERN.—80 cents, quarterly, paid June 15 to holders of record May 15.

SOUTHERN PACIFIC.—52 cents, quarterly, paid June 19 to holders of record May 30.

WABASH.—Preferred, $4.50, paid April 14 to holders of record March 30.

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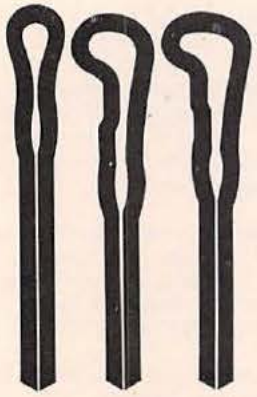

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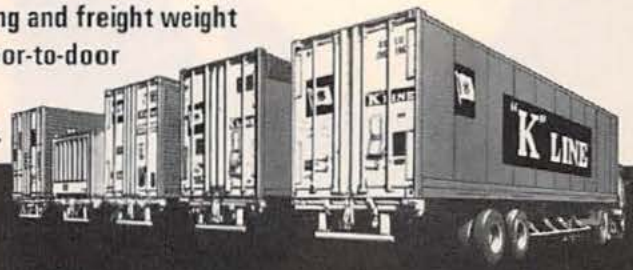

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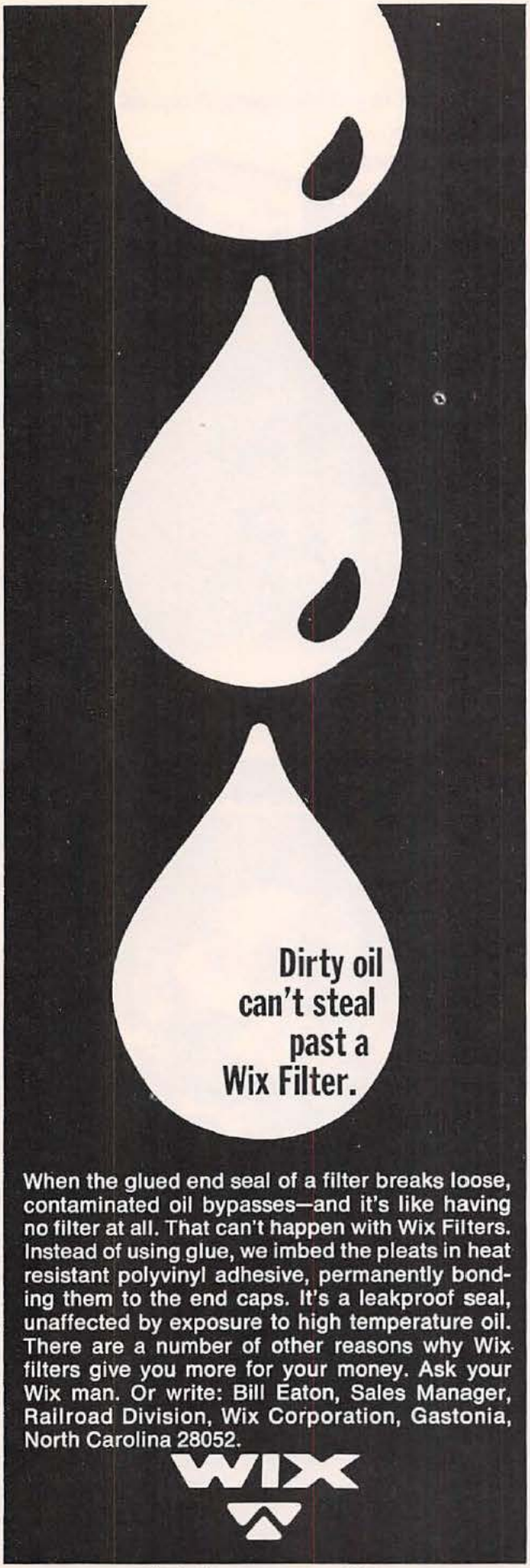
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Biaggini asks states to revamp regulation

While railroads are making sweeping regulatory reforms at the national level, they remain sharply aware of the need for an improved regulatory climate at state levels. Addressing the National Conference of State Transportation Specialists at San Francisco, Southern Pacific President Benjamin F. Biaggini suggested seven actions state regulators can take at once to encourage better transportation:

—End "conditioned-reflex" opposition to railroad requests and judge proposals solely on their public interest merits.

—Assist Federal authorities in developing a uniform set of new environmental standards for transportation.

—Cut the time lag in adjustment of intrastate rates to interstate pricing.

—Promote use of available Federal funds to match railroad money for improving grade crossing safety.

—Allow railroads to close more outdated one-man agencies and modernize operations through regional customer service centers.

—Support Surface Transportation Act legislation to end tax discrimination against railroads by some states.

—Recognize that better use of economical railroad transportation can reduce the cost to the public of needed highway construction, while also conserving land and energy resources and lowering pollution.

"Forty-seven of the 50 states have commissions regulating such aspects of railroad operations as freight rates, passenger train fares and service, taxation, safety and work rules," the SP chief said. "In the area of work rules we were subject to the so-called full-crew laws in 16 states ten years ago, but in 1972 we have seen these make-work restrictions lifted in Ohio, Indiana and Wisconsin, and only Arkansas remains to be solved. At the county and municipal levels, railroads are subject to still more regulations as to franchises, keeping grade crossings clear and local speed limits."

REGULATION HAS A LONG HISTORY

The railroad industry has been regulated longer than any other under our form of government, Biaggini pointed out. "It has always been a private industry made up of numerous publicly held companies, but because of its utility-type characteristics which were rightly recognized as railroads expanded throughout the nation, governmental encouragement with limited regulation—rather than governmental ownership—was the concept which this country concluded was best both for the industry and for the public. When you look at the nationalized railroads which exist in most other countries and when you also look at some of our own governmental enterprises, the wisdom of private ownership and operation of our railroads needs no further justification."

In calling for the development of a freer environment for railroads specifically and transportation in general, Biaggini said, he is not advocating swift and sudden deregulation so much as a reconstitution and reorientation of the regulatory system.

"I am thinking of a modern system which regulates only to the extent that regulation is beneficial to the industry and to the nation, and which fosters advancement and improvement—one that performs a creative administrative and research function and not a strictly judicial one alone, and which, hopefully, would look forward to an ever-diminishing role. In other words, we should deemphasize the punitive aspects and we should strip away the ritual. Of course, there are honest differences of opinion about just how to do this, and there is extensive debate about it at this moment, but this should be our aim."

Market Outlook

CARLOADINGS

Loadings of revenue freight in the week ended June 10 totaled 533,183 cars, according to the Association of American Railroads. This was an increase of 57,219 cars, or 12.0%, compared with the preceding holiday week, and a decrease of 20,590 cars, or 3.7%, compared with the corresponding week last year. Ton-miles generated by carloadings in the week ended June 10 are estimated at 15.9 billion, a decrease of 0.2% below the corresponding week of 1971.

REVENUE FREIGHT CARLOADINGS

Commodity	June 10 week	June 3 week
Grain	21,896	16,165
Farm products	12,135	10,910
Metallic ores	43,005	43,308
Coal	99,724	83,455
Crushed stone, gravel & sand	30,669	26,718
Nonmetallic minerals	10,459	9,342
Grain mill products	18,198	16,201
Food and kindred products	23,294	21,744
Primary forest products	25,481	23,401
Lumber & wood products (except) furniture)	17,821	15,637
Pulp, paper & allied products	23,505	22,262
Chemicals & allied products	26,675	25,511
Petroleum products	8,941	8,140
Stone, clay & glass products	23,068	21,073
Coke	7,450	8,910
Metals & products	24,467	24,490
Motor vehicles & equipment	25,591	22,579
Waste & scrap materials	16,077	13,094
Forwarder & shipper assn. traffic	6,070	5,209
All other carloads	68,134	59,356
LCL traffic	523	420
Total cars loaded	**533,183**	**477,925**
Cumulative total, 23 weeks	1972 11,290,987	1971 11,690,160
Estimated revenue ton-miles (billions) 23 weeks	340.3	337.1

PIGGYBACK LOADINGS

U.S. piggyback loadings for the week ended June 3 totaled 21,971 cars (7.5% above the corresponding week last year) and 37,029 trailers or containers (up 14.6% from 1971). Both the 1971 and 1972 weeks included the Memorial Day holiday. Cumulative volume for the first 22 weeks of 1972 is 534,218 cars (up 7.0% from last year) and 893,404 trailers or containers (up 10.8% from 1971). In addition to freight, 1,803 cars carrying 3,008 trailers or containers of mail and express traffic were handled piggyback. Cumulative figures for the first 22 weeks of 1972 are 53,353 cars (down 25.7% from the 1971 total, and 84,744 trailers or containers (down 20.7% from 1971).

IN CANADA

10 days ending	Tons of Revenue Freight	Cumulative Totals
May 31, 1972	6,573,945	83,276,943
May 31, 1971	5,729,951	79,315,662

NEW FACILITIES

● *Chesapeake & Ohio/Baltimore & Ohio.*—Will install 19 Kar-Trak automatic car identification systems in Chicago; Park Jct., near Philadelphia; Elsmere Jct., Wilmington, Del.; Cumberland, Md.; and Walbridge, Ohio, near Toledo. The installation contract was made with Servo Corp. of America. Plans are to install additional aci systems at 70 or more locations in other cities and at key traffic points.

● *Southern.*—Has purchased four high-speed extended core memories from Ampex Corp. to increase throughput performance of four IBM 360 computers. The computers are used for on-line data processing to monitor operations of rail cars.

SPECIAL

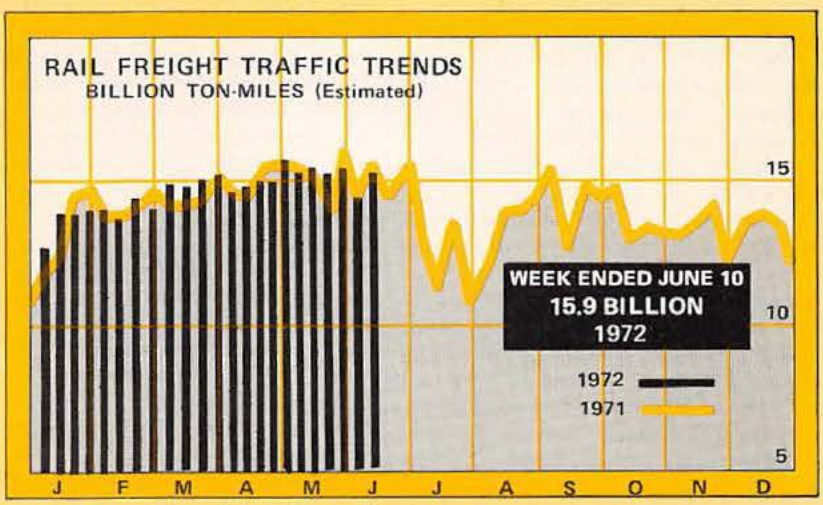
● *Penn Central.*—Is arranging to lease 981 new motor vehicles to replace about 25% of its motor vehicle fleet. They will be leased from Excelsior Truck Leasing Co. and used by PC's operating department in connection with its maintenance of way and equipment, communications and signals and transportation functions. The vehicles include pickup, light utility and dump trucks, passenger cars, wreck and welder trucks and tankers.

FOREIGN

● *French National* (SNCF).—Placed a $13-million order with the Univac Division of Sperry Rand France for three UNIVAC 1110 computer systems that will be used to direct message switching in a national network to expedite car control, to keep track of equipment maintenance, to prepare train schedules, and to survey traffic flow, among other applications.

TRANSIT

● *New York City Transit Authority.*—Has awarded a $6-million contract to WABCO's Signal & Communications Division for furnishing and installing signal and control equipment in three subway areas in the boroughs of Brooklyn and Manhattan.



Source: Association of American Railroads

All signals are "go" for Chicago Terminal aci

Implementation of the first joint railroad terminal information system will begin Aug. 1. Railroads represented by the General Managers Association of Chicago some time ago designed and developed the means of collecting information—on a real-time basis— on the movement of 17,410,500 freight cars making up 512,460 trains per year that originate, terminate or move through the Chicago Terminal. Railroad/Federal-government funding for the project has now been assured.

● **ACI at 40 sites.** The main part of the project involves installation of 109 automatic car identification (aci) scanners at 40 sites adjacent to tracks connecting more than 100 freight yards served by 30 railroads in the Chicago Terminal. Each time a train passes one of these scanner sites, the information represented by red-white-blue labels on the side of the rolling stock, and other cargo containers in view on cars, will be read by the optical scanner and transmitted to a central computer. There it will be merged with detailed information on the cars furnished by the railroads and fed into the same central computer.

As a result of this input from the scanners and the railroads, output information on advance consists, "OS" train location reports, and interchange, empty-car and system-equipment analysis reports will be provided to each railroad in its own format.

● **Four-year effort.** Development and design of the Chicago Railroad Terminal Information System originated with a 12-man study committee that began work in May 1968. Task forces were committed to the project on a full-time basis to design the master plan and make an economic evaluation of the system. Members of the special committee and the task forces were from 12 different railroads. Among them were superintendents, trainmasters, industrial engineers, data processing directors, communication engineers, and operations and research personnel.

The system was designed basically to help clear away congestion in yards and on routes connecting various yards and railroads. Lack of inter-railroad communication of advance and current information on cars and trains was a problem. And reliable information on cars for operating and record-keeping purposes was needed.

● **Many pluses.** Sponsors of the project point out that achievement of the major goal—providing railroads with accurate, detailed and timely information on cars and trains—will have far-ranging benefits. It will provide an incentive for new companies to locate, and present industry to remain, in the area. It will enable railroads to reduce congestion on city streets and expressways by increasing the number of trailers interchanged via rail rather than over the street. It will minimize inconvenience to the public at rail-highway grade crossings.

For shippers, it will mean an improvement in over-all service. The system will also help insure that shippers receive the number and the kind of cars they need, when they need them. Availability of accurate, up-to-the minute information from railroads will also help shippers maintain better control over inventories of material and products.

For railroads, the system will help protect existing income as well as attract new sources of revenues. Reduction of transit time will substantially improve equipment utilization. The system's output will also help railroads improve their clerical record-keeping, and achieve better utilization of manpower in yard operations.

For its part, the Federal government will have a working model of a railroad terminal information system potentially applicable to all terminals in the country. The Federal government also welcomes what it views as a pilot project for a beginning in the development of a national network of railroad train and car information systems.

The guidance required to lift the project off the drawing board was supplied by the GMA Executive ACI Steering Committee, which included J.R. Cary (chairman), general manager, B&O/B&OCT; Larry Cena, vice president-operations, Santa Fe; H.S. Vierling, vice president, Chicago & Eastern Illinois; R.E. Sullivan, general manager, Indiana Harbor Belt; and R.E. Dowdy, president and general manager, Belt Railway of Chicago.

● **FRA will help fund.** Through the efforts of this group, John W. Ingram, Federal Railroad Administrator, became acquainted with the aims and work of the Chicago project, which now has the Railroad Administration's full support and endorsement.

Federal government funds amounting to $50,000 per month for 5 years, or a total of $3 million, have been pledged in support of the system. DOT Secretary John A. Volpe was reported ready last week to make a formal announcement to this effect. Cost of the system to the participating railroads is estimated to be approximately $100,000 per month.

A non-profit corporation called Chicago Railroad Terminal Information System Inc. has been formed to implement and administer the system for the railroads. This corporation will be the carriers' legal representative in dealings with suppliers of services and equipment in support of the system. It will also be the party entering into contract with the Federal Railroad Administration for government funds. Directors and officers of the corporation will be elected by the participating railroads at the corporation's first meeting in July.

Reports released on tank car safety

A pair of preliminary progress reports on the $1,125,000 tank car safety research and test project initiated over two years ago under the sponsorship of the Association of American Railroads and five tank car builders and lessors (working through the Railway Progress Institute) were released earlier this month by the project's review committee. Final reports on the project along with recommendations for future action will be issued in July and again next January, according to R.B. Oppenheimer, executive vice president-operations, North American Car Corp., who is serving as chairman of the review committee. NAC, Pullman Transport Leasing Co., ACF Industries and its Shippers Car Line Division, General American Transportation Corp. and Trans Union Corp. are the RPI members participating in the project.

The preliminary reports outline the 13 technical phases of tank car design and accident behavior which have been under investigation by the research team throughout the past two years. They include review of accidents, literature and related experiences; studies of tank car steels, safety valves and relief devices; studies of tank heads and head shield requirements; investigations of designs of tanks and both tank and non-tank components; research into thermal effects and pressure vessel failures; and analysis of accident data. Reduced scale models of tank cars were used in portions of the research project.

It was stressed in the project reports that the research activities dealt strictly with investigations of the safety aspects of tank cars involved in accidents, and not with the causes of the accidents such as derailments, dock fires or things of that nature. It is not likely that the tank car safety project will ever be completely deactivated, although there are plans to slim it down somewhat.

Safety programs need intensity, says Claytor

The philosophy of safety in the 70s is based on four elements, W. Graham Claytor, Jr., president of the Southern, told the annual membership meeting of the AAR's Safety Section. Those elements are teamwork, organization, involvement and realism. "The only novelty about any of them," Claytor added, "is the intensity with which we must pursue the ideas they represent, and the growing specter of government intervention on an even greater scale if we fail to do so successfully."

There are three basic considerations in organizing or reorganizing a safety effort, Claytor said.

"First, it must be managed and strongly supported at the highest level. There can be no question in anyone's mind of top management's commitment to safety. We have to be willing to make real investments in safety—including investments in better track testing and more extensive track maintenance as well as other improvements that will add to the safety of the railroad plant. If ours is nothing more than lip service to safety, our people will soon know it, and our safety program will suffer.

"Second, the basic safety staff must be made up of skilled, experienced people who are thinkers, planners, motivators and catalysts. Their influence has to reach directly into the operating, mechanical and maintenance-of-way departments where safety is of such paramount importance.

"The third important consideration. . .is to make sure that the safety representatives on the front lines of transportation—the local safety chairmen in the shops, yards and terminals—have real responsibility and are suitably recognized for what they do. This is where organization leads to involvement. A safety chairman who takes his job seriously will soon have other railroaders around him taking their commitment to safety seriously. . . ."

The Southern chief executive told the meeting he is disturbed by some recent efforts to extend the Secretary of Labor's jurisdiction—under the Occupational Safety and Health Act of 1970—into the field of railroad safety. "I think the law is clear that this is an unwarranted intrusion into the jurisdiction of the Secretary of Transportation. Beyond that, I think that OSHA regulation on top of FRA regulation not only is unnecessary but would also put railroad safety efforts in the almost impossible situation of serving two masters under possibly conflicting sets of rules. The confusion and administrative burden this would place on the railroads could be intolerable; safety itself could only be the loser."

The extent to which railroads can spend for needed improvements to increase safety, Claytor continued, depends on how much money they earn and can get through financing.

Claytor suggested that legislators interested in railroad safety lend active support to other "railroad safety measures" currently under consideration by the Congress: the Surface Transportation Act and related railroad assistance bills.

"One provision of this proposed legislation deals directly with safety by requiring that at least 5% of all Federal Highway Trust Fund money allocated to a state be used for improving rail-highway grade crossings, and by allowing this also to be extended to non-Federal-aid highways. An unbelievably high percentage of all railroad-associated accidents occur at highway crossings. Any provision of the Surface Transportation Act or related legislative measures that would help railroads and other carriers finance the improvements needed to serve America's growing transportation demands better has safety implications. Improvements that help us serve better also usually help us to serve more safely."

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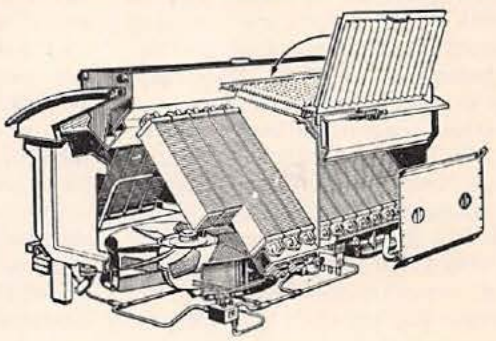

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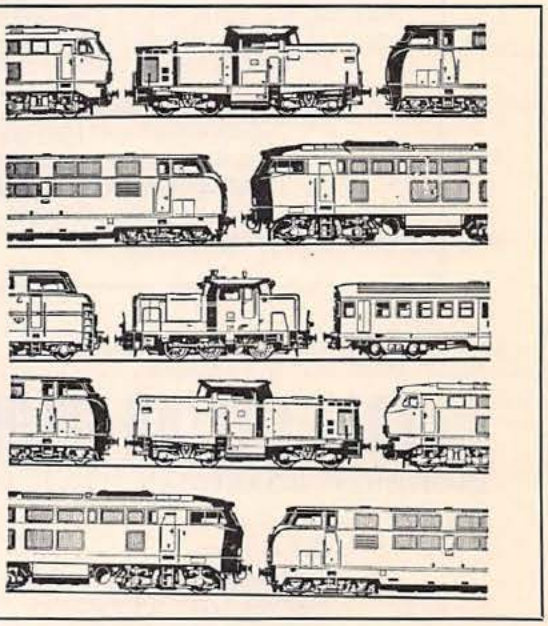

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M/W-Signal department alliance cuts costs

Cooperation between the maintenance of way and signal departments has always been profitable for railroads. In recent years, thanks to new signal technology, the cooperation is producing handsome monetary savings. Specifically, m/w efforts to use more continuous welded rail have given signal departments the high-green to install track circuits of ever greater length and to install other controls requiring fewer insulated rail joints.

• **Savings continue.** A survey of 18 major Class I railroads reveals that 10 roads reported savings totaling $736,065 during the past year. Included are reductions in maintenance costs due to eliminating insulated joints, plus savings in initial installation costs.

Fourteen roads in the survey eliminated 5,275 pairs of insulated rail joints last year. Techniques include center-fed direct current track circuits (a circuit 16,000 feet long can be obtained compared with 4,000 feet for a conventional end-fed circuit); audio frequency overlay circuits and coded dc track circuits. Many roads are standardizing on frequency overlay track circuits at railroad-highway grade crossings. Most of these newer types of circuits are installed before laying continuous welded rail.

• **Some joints remain.** Although m/w men might like to see insulated joints completely eliminated because of the maintenance problem and occasional cutting of welded rail, the technology has not yet been developed to permit this. All 18 roads reported that insulated rail joints will be retained at all absolute or controlled signal locations and at all power switches. All but one road will continue to install insulated rail joints at intermediate signals in automatic block signal territory. One railroad has made successful installations of pulse modulated control type track circuits in block signal territory without use of insulated joints at intermediate signals between the ends of two adjacent sidings.

Another railroad reported that it uses insulated rail joints at all turnouts. One other installs one pair of insulated joints at each electric lock location. Seventeen roads reported use of overlay type circuits for release of electric locks on hand-throw switches. Another railroad retains insulated joints at turnouts to isolate the tracks used for unloading flammable liquids.

• **Life varies.** Life of insulated joints varies from road to road and depends upon tonnage, the speed of trains and the condition of rail, ties and ballast. Several roads reported that life of joints in main tracks varies from a few months to three years or more. One railroad says it receives insulated joint life of 10 years in ribbon rail with 20 million annual gross tons, but twice as much life in jointed track. This ratio holds for several other roads. Also, several roads report that insulated joint life is twice as great in side tracks and on branch lines as in main track service.

• **Maintenance costs vary.** Since joint life varies, it follows that maintenance costs will also vary. The range reported by the 18 roads in the survey is from $40 to $250 per joint per year. Some of the disparity is due to accounting for replacement of entire insulated joints while in other cases only inspection and end-post replacement are made.

As for costs, one road reported that overlay track circuits cost approximately 50% more than dc track circuits with insulated joints. Maintenance costs of main track insulated rail joints will average about $75 per joint per year. For an ordinary crossing protection installation, maintenance cost for dc track circuits with insulated joints would be $675 a year, and for overlay circuits about $390 a year.

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Smith quits as head of Jersey Central

Central of New Jersey President Thomas J. Smith has resigned effective June 30. Smith, a former Penn Central auditor, has been chief executive of the carrier since March, 1971.

It was the second executive departure from the troubled road in a month. Marketing Vice President H.G. Hohorst quit to become traffic and marketing vice president for Prudential-Grace Lines, an ocean carrier, in late May.

CNJ, which has been in reorganization since 1967, faces a Federal court hearing on June 27 on a creditor's petition that the road be liquidated.

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Viewpoint

Railroads as their customers see them

Railroad shippers have their grievances, and given a chance they will air them. Ask a shipper what's wrong with railroads, and it's hard to get him to stop talking.

Railway Age has often given these men an opportunity to put their complaints on the record, and did so again in the June Traffic Poll. We asked: "What bothers you most today as a railroad shipper?" We also asked: "Are you more (or less) hopeful for the future of railroading today than you were a year ago?"

A cross-section of the replies of 55 leading industrial traffic managers is published in this issue. The new finding: While shippers still think there is much wrong with the railroads, many of them are increasingly aware of what's *right.*

It is significant, we submit, that a number of shippers listed as their No. 1 gripe *not* equipment shortages, *not* service breakdowns, *not* astigmatic management—but situations that are beyond the immediate control of railroad managers: e.g., the failure of Congress to move swiftly on legislation; the problems posed by escalating demands of the labor organizations.

Many of those shippers who did list specific complaints indicated at the same time that they were profoundly aware of the efforts the carriers are making in their behalf. Some examples:

Robert G. Reedy, manager of transportation pricing, analysis and adjustment for Vulcan Materials Co., while bothered by "the continual decline in the number of rail cars and the seeming inability of the carriers to slow down this decline" (a familiar grievance), was nonetheless heartened by the fact that "the railroads have begun to analyze their problems and to seek solutions [and] now seem willing to abandon old techniques and explore new ones" (an all-too-unfamiliar compliment).

Clyde L. Jacobs, manager of transportation for Crown Zellerbach, was disturbed by "the failure of railroads as an industry to take innovative steps to retain and increase their share of the traffic moving"—but he was encouraged by Penn Central's progress in cleaning up the country's stickiest transportation mess; and he was willing to credit "better management" generally for the failure of an expected car shortage to develop.

Lloyd C. Philips, traffic manager for Riviana Foods, complained that too much money was being spent on specialized equipment, at the expense of the kind of cars his own company needs for switching—but on the whole he admired the industry's efforts to "take advantage of and to utilize technology in every way." Philips concluded: "Management is not in a rut, it is looking ahead."

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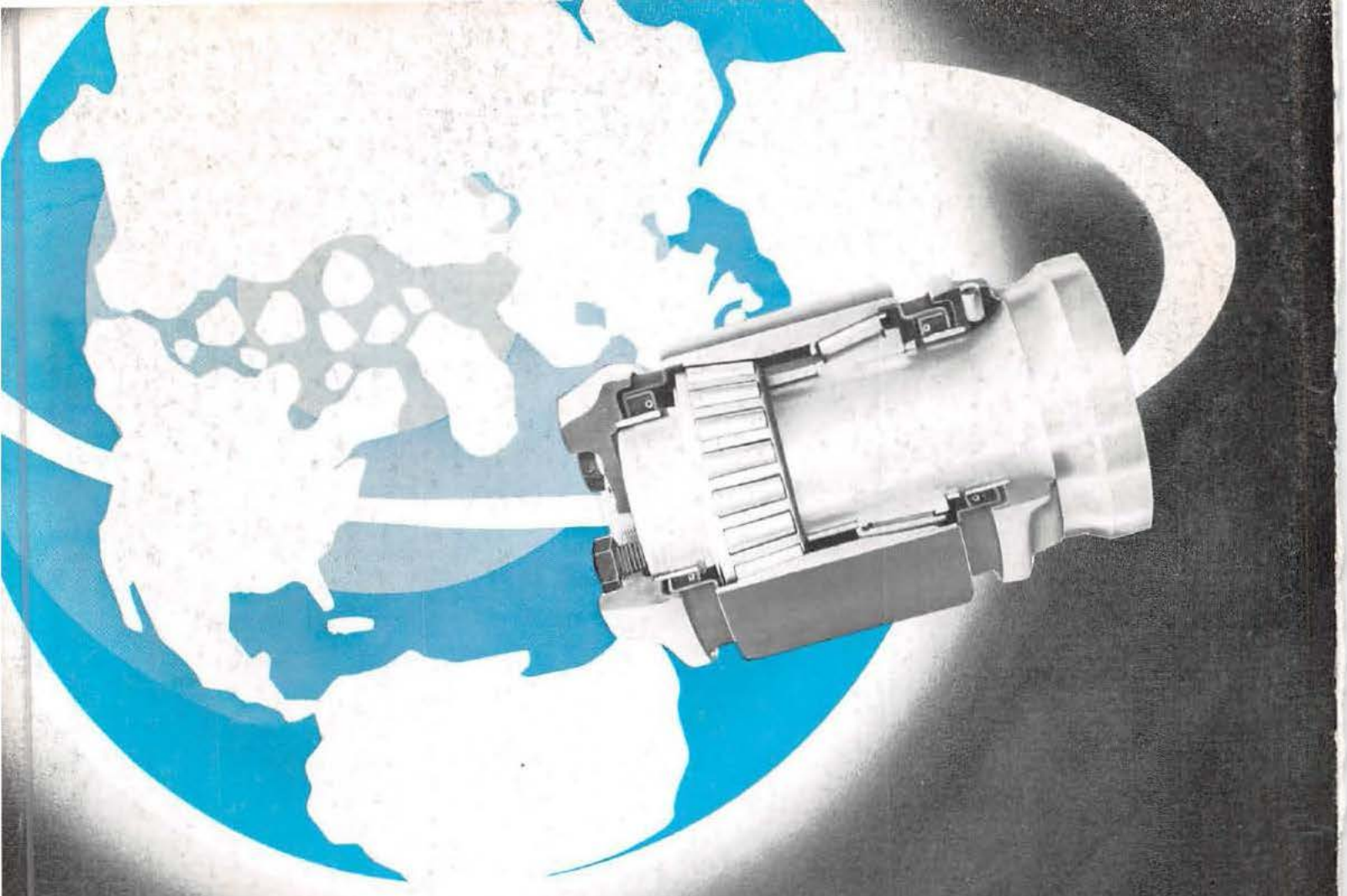

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